

## CLASS-XII

## **SESSION-2021-22**

### PRACTICE SAMPLE PAPER SET-4

Note: Blank OMR Sheet is attached below.



#### DELHI PUBLIC SCHOOL, SAIL TOWNSHIP, RANCHI SESSION - 2021-22 OMR SHEET

General Instructions 1. This sheet should not be folded or of 2. Use only blue/black ball pen 3. Circle should be darkened complete			
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Name & Signature of the Invigilator

Signature of the Examiner



### DELHI PUBLIC SCHOOL SAIL TOWNSHIP, RANCHI SAMPLE PAPER (TERM 1)

#### CLASS XII PREPARED BY: H.METILDA

#### SUB: MATHEMATICS

Q1. A general election of Lok Sabha is a gigantic exercise. About 911 million people were eligible to vote and voter turnout was about 67%, the highest ever



Let I be the set of all citizens of India who were eligible to exercise their voting right in general election held in 2019. A relation 'R' is defined on I as follows:

R = { $(V_1, V_2) : V_1, V_2 \in I$  and both use their voting right in general election – 2019} [CBSE Question Bank]

(a) Two neighbors X and  $Y \in I$ . X exercised his voting right while Y did not cast her vote in general election-2019. Which of the following is true?

- (i)  $(X, Y) \in R$  (ii)  $(Y, X) \in R$
- (iii)  $(X, X) \notin R$  (iv)  $(X, Y) \notin R$

(b) Mr. 'X' and his wife 'W' both exercised their voting right in general election-2019, Which of the following is true?

- (i) both (X, W) and (W, X)  $\in \mathbb{R}$
- (ii)  $(X, W) \in R$  but  $(W, X) \notin R$
- (iii) both (X, W) and (W, X)  $\notin R$
- (iv) (W, X)  $\in R$  but (X,W)  $\notin R$

(c) Three friends  $F_1$ ,  $F_2$  and  $F_3$  exercised their voting right in general election-2019, then which of the following is true?

- (i)  $(F_1, F_2) \in R$ ,  $(F_2, F_3) \in R$  and  $(F_1, F_3) \in R$
- (ii)  $(F_1, F_2) \in R$ ,  $(F_2, F_3) \in R$  and  $(F_1, F_3) \notin R$
- (iii)  $(F_1, F_2) \in R$ ,  $(F_2, F_2) \in R$  but  $(F_3, F_3) \notin R$
- (iv)  $(F_1, F_2) \notin R$ ,  $(F_2, F_3) \notin R$  and  $(F_1, F_3) \notin R$
- (d) The above defined relation R is \_\_\_\_\_

(i) Symmetric and transitive but not reflexive

(ii) Universal relation

(iii) Equivalence relation

(iv) Reflexive but not symmetric and transitive

(e) Mr. Shyam exercised his voting right in General Election-2019, then Mr. Shyam is related to which of the following?

- (i) All those eligible voters who cast their votes
- (ii) Family members of Mr. Shyam
- (iii) All citizens of India
- (iv) Eligible voters of India

Q2. Raji visited the Exhibition along with her family. The Exhibition had a huge swing, which attracted 5 many children. Raji found that the swing traced the path of a Parabola as given by  $y = x^2$ .



Answer the following questions using the above information.

- (f) Let  $f : \mathbb{R} \to \mathbb{R}$  be defined by  $f(x) = x^2$  is\_\_\_\_\_
- (i) Neither Surjective nor Injective
- (ii) Surjective
- (iii) Injective
- (iv) Bijective
- (g) Let  $f: N \to N$  be defined by  $f(x) = x^2$  is \_\_\_\_\_
- (i) Surjective but not Injective
- (ii) Surjective
- (iii) Injective
- (iv) Bijective

(c) Let f : {1, 2, 3, ...}  $\rightarrow$  {1, 4, 9, ...} be defined by f(x) = x<sup>2</sup> is \_\_\_\_\_

- (i) Bijective
- (ii) Surjective but not Injective
- (iii) Injective but Surjective
- (iv) Neither Surjective nor Injective

(d) Let f : N  $\rightarrow$  R be defined by f(x) = x<sup>2</sup>. Range of the function among the following is \_\_\_\_\_

- (i) {1, 4, 9, 16, ...}
- (ii) {1, 4, 8, 9, 10, ...}

(iii) {1, 4, 9, 15, 16, ...}

- (iv) {1, 4, 8, 16, ...}
- (e) The function f : Z  $\rightarrow$  Z defined by f(x) = x<sup>2</sup> is \_\_\_\_\_
- (i) Neither Injective nor Surjective
- (ii) Injective
- (iii) Surjective
- (iv) Bijective

Q3.



Two men on either side of a temple of 30 metres high from the level of eye observe its top at the angles of elevation  $\alpha$  and  $\beta$  respectively. (as shown in the figure above). The distance between the two men is  $40\sqrt{3}$  metres and the distance between the first person A and the temple is  $30\sqrt{3}$  metres. Based on the above information answer the following:

(i) 
$$\sin^{-1}\left(\frac{2}{\sqrt{3}}\right)$$
 (ii)  $\sin^{-1}\left(\frac{1}{2}\right)$   
(iii)  $\sin^{-1}(2)$  (iv)  $\sin^{-1}\left(\frac{\sqrt{3}}{2}\right)$ 

(b) ∠CAB = α =

(i) 
$$\cos^{-1}\left(\frac{1}{5}\right)$$
 (ii)  $\cos^{-1}\left(\frac{2}{5}\right)$   
(iii)  $\cos^{-1}\left(\frac{\sqrt{3}}{2}\right)$  (iv)  $\cos^{-1}\left(\frac{4}{5}\right)$ 

(c)  $\angle$ BCA =  $\beta$  =

(i) 
$$\tan^{-1}\left(\frac{1}{2}\right)$$
 (ii)  $\tan^{-1}(2)$   
(iii)  $\tan^{-1}\left(\frac{1}{\sqrt{3}}\right)$  (iv)  $\tan^{-1}(\sqrt{3})$ 

(d) ∠ABC

(i) 
$$\frac{\pi}{4}$$
 (ii)  $\frac{\pi}{6}$   
(iii)  $\frac{\pi}{2}$  (iv)  $\frac{\pi}{3}$ 

(e) Domain and Range of  $\cos^{-1}x$  is

(ii)  $[-1, 1], (0, \pi)$ (iii)  $[-1, 1], [0, \pi]$ (iv)  $(-1, 1), \left[-\frac{\pi}{2}, \frac{\pi}{2}\right]$ 

Q4. A teacher gives a table of the domain and range of inverse trigonometric functions to the students and told them that when we dealing with the inverse trigonometric functions, we need to careful about their range, which is defined from restricted domain of trigonometric functions.

The table is given as:

Functions	Domains	Ranges
y = sin <sup>-1</sup> x	[–1, 1]	$\left[\frac{-\pi}{2},\frac{\pi}{2}\right]$
$y = \cos^{-1} x$	[–1, 1]	[0, π]
y = cosec <sup>-1</sup> x	R – (–1, 1)	$\left[\frac{-\pi}{2},\frac{\pi}{2}\right] - \{0\}$
$y = sec^{-1} x$	R – (–1, 1)	$[0, \pi] - \left\{\frac{\pi}{2}\right\}$
y = tan <sup>-1</sup> x	R	$\left(\frac{-\pi}{2},\frac{\pi}{2}\right)$
$y = \cot^{-1} x$	R	(0, π)

Based on the above information answer the following:

(a) The value of x, when 
$$\cos^{-1}\left(\frac{-5}{13}\right) = \tan^{-1}(x)$$
 is  
(i)  $\frac{12}{5}$  (ii)  $\frac{-12}{5}$   
(iii)  $\frac{-5}{12}$  (iv) No solution  
(b) Let  $x < 0$ , then  $\tan^{-1}(x) + \tan^{-1}\left(\frac{1}{x}\right) =$   
(i)  $\frac{\pi}{2}$  (ii)  $\frac{-\pi}{2}$   
(iii)  $\pi$  (iv)  $-\pi$   
(c) The value of x, when  $\sin^{-1}\left(\frac{-3}{5}\right) = \tan^{-1} x$  is  
(i)  $\frac{-3}{4}$  (ii)  $\frac{3}{4}$   
(iii)  $\frac{4}{3}$  (iv)  $\frac{-4}{3}$   
(d) The value of  $\tan\left[\frac{1}{2}\cos^{-1}\left(\frac{2}{\sqrt{5}}\right)\right]$  is  
(i)  $2 + \sqrt{5}$  (ii)  $\sqrt{5} - 2$   
(iii)  $\frac{\sqrt{5} + 2}{2}$  (iv)  $5 + \sqrt{2}$ 

(e) The value of x, when 
$$\cos\left[\sin^{-1}\left(\frac{2}{5}\right) + \cos^{-1}(x)\right] = 0$$
  
(i)  $\frac{1}{5}$  (ii)  $\frac{2}{5}$   
(iii) 0 (iv) 1

Q5. A manufacture produces three stationery products Pencil, Eraser and Sharpener which he sells in two markets. Annual sales are indicated below:



Market	Products (in numbers)				
	Pencil	Eraser	Sharpener		
A	10,000	2000	18,000		
В	6000	20,000	8,000		

If the unit Sale price of Pencil, Eraser and Sharpener are ₹ 2.50, ₹ 1.50 and ₹ 1.00 respectively, and unit cost of the above three commodities are ₹ 2.00, ₹ 1.00 and ₹ 0.50 respectively, then, based on the above information answer the following: [CBSE Question Bank]

(a) Total revenue of market A

(i) ₹ 64,000 (ii) ₹ 60,400 (iii) ₹ 46,000 (iv) ₹ 40,600

(b) Total revenue of market B

(i) ₹ 35,000 (ii) ₹ 53,000 (iii) ₹ 50,300 (iv) ₹ 30,500

(c) Cost incurred in market A

(i) ₹ 13,000 (ii) ₹ 30,100 (iii) ₹ 10,300 (iv) ₹ 31,000

(d) Profit in market A and B respectively are

(i) (₹ 15,000, ₹ 17,000) (ii) (₹ 17,000, ₹ 15,000)

(iii) (₹ 51,000, ₹ 71,000) (iv) (₹ 10,000, ₹ 20,000)

(e) Gross profit in both market

(i) ₹ 23,000 (ii) ₹ 20,300 (iii) ₹ 32,000 (iv) ₹ 30,200

Q6.

Amit, Biraj and Chirag were given the task of creating a square matrux of order 2.

Below are the matrices created by them. A, B, C are the matrices created by Amit, Biraj and Chirag respectively.

 $A = \begin{bmatrix} 1 & 2 \\ -1 & 3 \end{bmatrix} \quad B = \begin{bmatrix} 4 & 0 \\ 1 & 5 \end{bmatrix} \quad C = \begin{bmatrix} 2 & 0 \\ 1 & -2 \end{bmatrix}$ 

If a = 4 and b = -2, based on the above information answer the following: [CBSE Question Bank]

(f) Sum of the matrices A, B and C, A + (B + C) is

$$\begin{array}{c} (i) \begin{bmatrix} 1 & 6 \\ 2 & 7 \end{bmatrix} & (ii) \begin{bmatrix} 6 & 1 \\ 7 & 2 \end{bmatrix} \\ (iii) \begin{bmatrix} 7 & 2 \\ 1 & 6 \end{bmatrix} & (iv) \begin{bmatrix} 2 & 1 \\ 7 & 6 \end{bmatrix}$$

(g)  $(A^T)^T$  is equal to

( <i>i</i> )	$\begin{bmatrix} 1 & 2 \\ -1 & 3 \end{bmatrix}$	<i>(ii)</i>	23	1 -1
(iii)	$\begin{bmatrix} 1 & -1 \\ 2 & 3 \end{bmatrix}$	(iv)	2	3

(h) (bA)<sup>T</sup> is equal to

( <i>i</i> )	-2 2	-4	(ii)	-2 -4	2
(iii)	[-2 6	2 _4]	(iv)	[-6 2	$\begin{bmatrix} -2 \\ 4 \end{bmatrix}$

(i) AC - BC is equal to

(i)	[-4 [-4	-6 4	(ii)	4	$-4 \\ -6$
(iii)	[-4 -6	-4 4	( <i>iv</i> )	[-6 _4	4

(j) (a + b)B is equal to

( <i>i</i> )	$\begin{bmatrix} 0 & 8 \\ 10 & 2 \end{bmatrix}$	(ii)	2 8	10 0
(iii)	$\begin{bmatrix} 8 & 0 \\ 2 & 10 \end{bmatrix}$	(iv)	2 8	$\begin{bmatrix} 0\\10 \end{bmatrix}$

Q7. Two farmers Ramakishan and Gurucharan Singh cultivate only three varieties of rice namely Basmati, Permal and Naura. The sale (in rupees) of these varieties of rice by both the farmers in the month of September and October are given by the following matrices A and B.



September sales (in Rupees)

 $A = \begin{bmatrix} 10,000 & 20,000 & 30,000 \\ 50,000 & 30,000 & 10,000 \end{bmatrix} \begin{array}{c} \text{Ramakishan} \\ \text{Gurucharan} \end{array}$ 

October sales (in Rupees)

 $B = \begin{bmatrix} 5,000 & 10,000 & 6,000 \\ 20,000 & 10,000 & 10,000 \end{bmatrix}$ Ramakishan [CBSE Question Bank]

(k) The total sales in September and October for each farmer in each variety can be represented as\_\_\_\_\_.

- (i) A + B (ii) A B
- (iii) A > B (iv) A < B
- (I) What is the value of A<sub>23</sub>?
  - (i) 10000 (ii) 20000
  - (iii) 30000 (iv) 40000
- (m) The decrease in sales from September to October is given by \_\_\_\_\_.
  - (i) A + B (ii) A B
  - (iii) A > B (iv) A < B

(n) If Ramkishan receives 2% profit on gross sales, compute his profit for each variety sold inOctober.

- (i) ₹ 100, ₹ 200 and ₹ 120
- (ii) ₹ 100, ₹ 200 and ₹ 130
- (iii) ₹ 100, ₹ 220 and ₹ 120
- (iv) ₹ 110, ₹ 200 and ₹ 120

(o) If Gurucharan receives 2% profit on gross sales, compute his profit for each variety sold inSeptember.

- (i) ₹ 100, ₹ 200, ₹ 120
- (ii) ₹ 1000, ₹ 600, ₹ 200
- (iii) ₹ 400, ₹ 200, ₹ 120
- (iv) ₹ 1200, ₹ 200, ₹ 120
- Q8. Assume the following data regarding the number of USB cables and their types manufactured in the company I, II and III per day.
  - Туре А Туре В Туре С

I 40 30 50	30 50
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II	20	80	10

- III 40 60 5
- (p) How the above information can be represented in a square matrix of 3 × 3?

	[40	30	50]		40	30	50
( <i>i</i> )	40	60	5	( <i>ii</i> )	20	80	10
	20	80	10		40	60	5
	[40	20	40]		[30	40	50
(iii)	30	80	60	(iv)	80	20	10
	50	10	5		60	40	5

- (q) What does the element of 3rd row and 3rd column represents?
  - (i) Number of USB type 'C' = 5

Produced by company = III

- (ii) Number of USB type 'C' = 50Produced by company = III
- (iii) Number of USB type 'C' = 40

Produced by company = III

(iv) Number of USB type 'C' = 5

Produced by company = I

- (r) How many USB cables are produced by company I in 3 days?
  - (i) 120 (ii) 360
  - (iii) 90 (iv) 150
- (s) How many USB cables are produced by all the companies in 2 days?
  - (i) 670 (ii) 560
  - (iii) 870 (iv) 1050
- (t) How many USB cables of C-type are produced by company II?
  - (i) 10 (ii) 5
  - (iii) 50 (iv) 60

Q9.

Manjit wants to donate a rectangular plot of land for a school in his village. When he was asked to give dimensions of the plot, he told that if its length is decreased by 50 m and breadth is

increased by 50 m, then its area will remain same, but if length is decreased by 10 m and breadth is decreased by 20 m, then its area will decrease by  $5300 \text{ m}^2$ .



[CBSE Question Bank]

Based on the information given above, answer the following questions:

- (u) The equations in terms of X and Y are
  - (i) x y = 50, 2x y = 550
  - (ii) x y = 50, 2x + y = 550
  - (iii) x + y = 50, 2x + y = 550
  - (iv) x + y = 50, 2x + y = 550
- (v) Which of the following matrix equation is represented by the given information

$$\begin{array}{c} (i) \begin{bmatrix} 1 & -1 \\ 2 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 50 \\ 550 \end{bmatrix} \\ (ii) \begin{bmatrix} 1 & 1 \\ 2 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 50 \\ 550 \end{bmatrix} \\ (iii) \begin{bmatrix} 1 & 1 \\ 2 & -1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 50 \\ 550 \end{bmatrix} \\ (iv) \begin{bmatrix} 1 & 1 \\ 2 & 1 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} -50 \\ -550 \end{bmatrix}$$

(w) The value of x (length of rectangular field) is

- (i) 150 m (ii) 400 m
- (iii) 200 m (iv) 320 m
- (x) The value of y (breadth of rectangular field) is
  - (i) 150 m (ii) 200 m
  - (iii) 430 m (iv) 350 m
- (y) How much is the area of rectangular field?
  - (i) 60000 sq m. (ii) 30000 sq m.
  - (iii) 30000 m (iv) 3000 m

Q10.

Raja purchases 3 pens, 2 pencils and 1 mathematics instrument box and pays ₹ 41 to the shopkeeper. His friends, Daya and Anil purchases 2 pens, 1 pencil, 2 instrument boxes and 2 pens, 2 pencils and 2 mathematical instrument boxes respectively. Daya and Anil pays ₹ 29 and ₹ 44 respectively.

Based on the above information answer the following

- (z) The cost of one pen is
  - (i) ₹2 (ii) ₹5

- (iii) ₹ 10 (iv) ₹ 15
- (aa) The cost of one pen and one pencil is
  - (i) ₹5 (ii) ₹10
  - (iii) ₹ 15 (iv) ₹ 17
- (bb) The cost of one pen and one mathematical instrument box is
  - (i) ₹7 (ii) ₹10
  - (iii) ₹ 15 (iv) ₹ 18
- (cc) The cost of one pencil and one mathematical instrumental box is
  - (i) ₹5 (ii) ₹10
  - (iii) ₹ 15 (iv) ₹ 20
- (dd) The cost of one pen, one pencil and one mathematical instrumental box is
  - (i) ₹ 10 (ii) ₹ 15
  - (iii) ₹ 22 (iv) ₹ 25

#### Q11.

A potter made a mud vessel, where the shape of the pot is based on f(x) = |x - 3| + |x - 2|, where f(x) represents the height of the pot.



(ee) When x > 4 What will be the height in terms of x?

- (i) x-2 (ii) x-3
- (iii) 2x 5 (iv) 5 2x
- (ff) Will the slope vary with x value?
  - (i) Yes (ii) No

(gg) What is 
$$\frac{dy}{dx}$$
 at x = 3?

- (i) 2
- (ii) –2

(iii) Function is not differentiable

(iv) 1

- (hh) When the x value lies between (2, 3) then the function is
  - (i) 2x 5 (ii) 5 2x
  - (iii) 1 (iv) 5
- (ii) If the potter is trying to make a pot using the function f(x) = [x], will he get a pot or not? Why?
  - (i) Yes, because it is a continuous function
  - (ii) Yes, because it is not continuous
  - (iii) No , because it is a continuous function
  - (iv) No, because it is not continuous

#### Q12.

Suppose f is a real function on a subset of the real numbers and let c be a point in the domain of f. Then f is continuous at c if  $\lim_{x \to c} f(x) = f(c)$ 

The function f is given by

$$f(x) = \begin{cases} ax+5, & \text{if } x < 5\\ 10, & \text{if } x = 5\\ bx+20, & \text{if } x > 5 \end{cases}$$

The given function is continuous at x = 5

Based on the above information, answer the following questions.

- (a) The relation between a and b can be given by
  - (i) a + b = 3 (ii) a b = 2
  - (iii) a b = 3 (iv) b a = 3
- (b) The value of a is
  - (i) 1 (ii) 2
  - (iii) 3 (iv) 5
- (c) The value of b is

- (d) The value of function f(3) is
  - (i) 4 (ii) 5
  - (iii) 6 (iv) 8
- (e) The value of function f(10) is
  - (i) 1 (ii) 5
  - (iii) 0 (iv) 2

Q13.

Let a function 'f' having real valued domain for an interval 'R', then

(i) function 'f' is increasing for an interval 'R' if

 $a_1 < a_2$  on  $R \Rightarrow f(a_1) < f(a_2)$ .

(ii) function 'f' is decreasing for an interval 'R' if

 $a_1 < a_2$  on  $R \Rightarrow f(a_1) \ge f(a_2)$ .

(iii) function 'f' is constant for an interval 'R' if f (a) = Cfor

all  $a \in R$ .

Based on above information identify that

- (a) f(x) = 17x + 3 on R is
  - (i) increasing
  - (ii) decreasing
  - (iii) constant
  - (iv) neither increasing nor decreasing

(b)  $f(x) = e^{-4x}$  on R is

- (i) increasing
- (ii) decreasing
- (iii) constant
- (iv) neither increasing nor decreasing

(c) f(x) = 43 is

- (i) increasing
- (ii) decreasing
- (iii) constant
- (iv) neither increasing nor decreasing

(d)  $f(x) = e^{|x|}$  on  $(-\infty, 0)$  is

- (i) increasing
- (ii) decreasing
- (iii) constant
- (iv) neither increasing nor decreasing

(e) 
$$f(x) = e^{|x|}$$
 on  $(-\infty, \infty)$  is

- (i) increasing
- (ii) decreasing
- (iii) constant
- (iv) neither increasing nor decreasing

Q14.

The Relation between the height of the plant (y in cm) with respect to exposure to sunlight is governed by the following equation  $y = 4x - \frac{1}{2}x^2$  where x is the number

of days exposed to sunlight. [CBSE Question Bank]



(jj) The rate of growth of the plant with respect to sunlight is\_\_\_\_\_.

(i) 
$$4x - \frac{1}{2}x^2$$
 (ii)  $4 - x$ 

(iii) 
$$x - 4$$
 (iv)  $x - \frac{1}{2}x^2$ 

- (kk) What is the number of days it will take for the plant to grow to the maximum height?
  - (i) 4 (ii) 6
  - (iii) 7 (iv) 10

(II) What is the maximum height of the plant?

- (i) 12 cm (ii) 10 cm
- (iii) 8 cm (iv) 6 cm

(mm) What will be the height of the plant after 2 days?

- (i) 4 cm (ii) 6 cm
- (iii) 8 cm (iv) 10 cm

(nn) If the height of the plant is 7/2 cm, the number of days it has been exposed to the sunlight is

- (i) 2 (ii) 3
- (iii) 4 (iv) 1

Q15.

Let there exists a function 'f' which is double derivative at 'C' on an interval R where  $C \in R$ . Then,

(i) If f'(C) = 0 and  $f''(C) < 0 \Rightarrow x = C$  is a point where local maximum lies and f(C) will be the local maximum value of function 'f'.

(ii) If f'(C) = 0 and  $f''(C) > 0 \Rightarrow x = C$  is a point where local minimum lies and f(C) will be the local minimum value of function 'f'.

(iii) If f'(C) = 0 and  $f''(C) = 0 \Rightarrow$  Test is failed and then we do first derivative test and check aboutpoint 'C' that it is point of inflexion, minimum or maximum.

#### Based on above data find

(a) Local minimum value of  $f(x) = 8 + |x|, x \in \mathbb{R}$ .

(i) 8 (ii) 15 (iii) 10 (iv) 12

(b) Find local minimum value of

$$f(x) = \frac{3}{4}x^4 - 2x^3 - 12x^2 + 18$$
  
(i) -110 (ii) -17 (iii) 17 (iv) +20

(c) Find local maximum value of

$$f(x) = \frac{3}{4}x^4 - 2x^3 - 12x^2 + 18$$
  
(i) 18 (ii) -18 (iii) +144 (iv) -144

(d) Find the local maximum value of

$$f(x) = \frac{1}{2}x^4 + \frac{8}{3}x^3 + 3x^2 + 15$$
  
(i) 16.83 (ii) -15.83 (iii) 15.83 (iv) 16

(e) Find the local minimum value of

$$f(x) = \frac{1}{2}x^4 + \frac{8}{3}x^3 + 3x^2 + 15$$
  
(i) 10.5 (ii) 11.2 (iii) 18.6 (iv) 10.9

Q16.

The shape of a toy is given as  $f(x) = 6(2x^4 - x^2)$ . To make the toy beautiful 2 sticks which are perpendicular to each other were placed at a point (2, 3), above the toy.

- (a) Which value from the following may be abscissa of critical point?
  - (i)  $\pm \frac{1}{4}$  (ii)  $\pm \frac{1}{2}$
  - (iii) ±1 (iv) None
  - (b) Find the slope of the normal based on the position of the stick.
    - (i) 360 (ii) 360

(iii) 
$$\frac{1}{360}$$
 (iv)  $\frac{-1}{360}$ 

- (c) What will be the equation of the tangent at the critical point if it passes through (2, 3)?
  - (i) x + 360y = 1082 (ii) y = 360x 717
  - (iii) x = 717y + 360 (iv) none
- (d) Find the second order derivative of the function at x = 5.
  - (i) 598 (ii) 1176
  - (iii) 3588 (iv) 3312
- (e) At which of the following intervals will f(x) be increasing?

(i) 
$$\left(-\infty, -\frac{1}{2}\right) \cup \left(\frac{1}{2}, \infty\right)$$
  
(ii)  $\left(-\frac{1}{2}, 0\right) \cup \left(\frac{1}{2}, \infty\right)$   
(iii)  $\left(0, \frac{1}{2}\right) \cup \left(\frac{1}{2}, \infty\right)$   
(iv)  $\left(-\infty, -\frac{1}{2}\right) \cup \left(0, \frac{1}{2}\right)$ 

#### Q17.

A manufacturing company makes two models A and B of a product. Each piece of model A requires 9 labour hours for fabricating and 1 labour hour for finishing. Each piece of model B requires 12 hours for fabricating and 3 hours for finishing. For fabricating and finishing the maximum hours available are 180 and 30 respectively. The company makes a profit of ₹ 8000 on each piece of model A and ₹ 12000 on each piece of model B. Company wants to get maximum profit. On the basis of above information answer the following:

(oo) If x and y are the number of pieces of model A and model B respectively then the objectivefunction is

- (i) Maximise Z = 8000x + 1200y
- (ii) Maximise Z = 9x + y
- (iii) Maximise Z = 180x + 30y
- (iv) Maximise Z = 12x + 3y

(pp) The constraint for fabrication is

- (i) 9x + 12y < 180 (ii) 9x + 2y > 180
- (iii)  $12x + ay \le 180$  (iv)  $9x + 12y \le 180$
- (qq) The constraint for finishing is
  - (i)  $3x + 4y \ge 60$  (ii)  $x + 3y \le 30$
  - (iii)  $x + 3y \ge 180$  (iv) x + 3y < 30
- (rr) The maximum profit the company makes is
  - (i) ₹160000 (ii) ₹168000
  - (iii) ₹ 120000 (iv) None of these

(ss) The number of pieces of model A and model B are

- (i) 6, 12 (ii) 20, 0
- (iii) 12,6 (iv) 0,10

#### Q18.

For the celebration of birthday party Ms. Shukla plans to make two types of cake. She has 5 kg of flour and 1 kg of fat and she has all other ingredients with no shortage. I type of cake requires 200 g of flour and 25g of fat and II type of cake require 100 g of flour and 50 g of fat on the basis of above answer the following.

(a) If x be the number of cake of I type and y be the number of cake of II type then constraint for available flour is

- (i)  $200 x + 100 y \le 5$
- (ii)  $100x + 200y \le 5$
- (iii) 100 x + 200 y ≤ 5000

- (iv)  $0.2x + 0.1y \le 5$
- (b) Constrain for available fat is
  - (i)  $25x + 50 y \ge 1$
  - (ii)  $5x + 10y \le \frac{1}{5}$
  - (iii)  $25x + 50 y \le 1000$
  - (iv)  $x + 2y \ge 40$
- (c) The maximum number of cakes of I type
  - (i) 20 (ii) 50
  - (iii) 30 (iv) 35
- (d) The maximum number of cakes of II type
  - (i) 20 (ii) 10
  - (iii) 30 (iv) 0
- (e) If she starts selling cake at a price of ₹ 50 for type and ₹ 120 for II type, then maximum profitis
  - (i) 1000 (ii) 2200
  - (iii) 2400 (iv) 1700

Q19. If  $A = [a_{ij}]$  is a 2 × 3 matrix, such that  $a_{ij} = \frac{(-i + 2j)^2}{5}$ , then  $a_{23}$  is

(a)  $\frac{1}{5}$  (b)  $\frac{2}{5}$ (c)  $\frac{9}{5}$  (d)  $\frac{16}{5}$ 

Q20.  
If 
$$A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$$
, then  $A^2 - 5A - 7I$  is

(a) a zero matrix(b) an identity matrix(c) diagonal matrix(d) none of these

Q21.

If matrix A is of order  $m \times n$ , and for matrix B, AB and BA both are defined, then order of matrix B is

(a) 
$$m \times n$$
 (b)  $n \times n$  (c)  $m \times m$  (d)  $n \times m$   
Q22.  
Let  $\Delta = \begin{vmatrix} Ax^2 & x^3 & 1 \\ By^2 & y^3 & 1 \\ Cz^2 & z^3 & 1 \end{vmatrix}$  and  $\Delta_1 = \begin{vmatrix} Ax & By & Cz \\ x^2 & y^2 & z^2 \\ yz & zx & xy \end{vmatrix}$   
then

(a)  $\Delta + \Delta_1 = 0$  (b)  $\Delta \neq \Delta_1$ (c)  $\Delta = x\Delta_1$  (d)  $\Delta - \Delta_1 = 0$ 

Q23.  
If 
$$\Delta = \begin{vmatrix} a_{11} & a_{12} & a_{13} \\ a_{21} & a_{22} & a_{23} \\ a_{31} & a_{32} & a_{33} \end{vmatrix}$$
 and  $A_{ij}$  is cofactor of  $a_{ij}$ , then the value of  $\Delta$  is given by

(a)  $a_{11}A_{31} + a_{12}A_{32} + a_{13}A_{33}$ (b)  $a_{11}A_{11} + a_{12}A_{21} + a_{13}A_{31}$ (c)  $a_{21}A_{11} + a_{22}A_{12} + a_{23}A_{13}$ (d)  $a_{11}A_{11} + a_{21}A_{21} + a_{31}A_{31}$ 

Q24.

If A and B are invertible matrices then which of the following is not correct

(a)  $AdjA = |A|.A^{-1}$  (b)  $det(A^{-1}) = (det A)^{-1}$ 

(c)  $(AB)^{-1} = B^{-1}A^{-1}$  (d)  $(A + B)^{-1} = A^{-1} + B^{-1}$ 

Q25.

Let *A* be a non-angular square matrix of order  $3 \times 3$ , then  $|A \cdot adj A|$  is equal to (a)  $|A|^3$  (b)  $|A|^2$  (c) |A| (d) 3|A|

Q26. If a, b, c are in AP, then the value of  $\begin{vmatrix} x+1 & x+2 & x+a \\ x+2 & x+3 & x+b \\ x+3 & x+4 & x+c \end{vmatrix}$  is

(a) 4 (b) -3 (c) 0 (d) abc

Q27.

Derivative of  $\cot x^{\circ}$  with respect to x is

(a) cosec  $x^{\circ}$  (b) cosec  $x^{\circ}$  cot  $x^{\circ}$ (c)  $-1^{\circ}$  cosec<sup>2</sup>  $x^{\circ}$  (d)  $-1^{\circ}$  cosec  $x^{\circ}$  cot  $x^{\circ}$ 

Q28. If  $y = \tan -1 \left( \frac{1 - x^2}{1 + x^2} \right)$ , then  $\frac{dy}{dx}$  is equal to

(a) 
$$\frac{1}{1 + x^4}$$
  
(b)  $\frac{-2x}{1 + x^4}$   
(c)  $\frac{-1}{1 + x^4}$   
(d)  $\frac{x^2}{1 + x^4}$ 

Q29. If  $y = \sin^{-1}\left(\frac{3x}{2} - \frac{x^3}{2}\right)$ , then  $\frac{dy}{dx}$  is

(a) 
$$\sqrt{4-x^2}$$
  
(b)  $\frac{-3}{\sqrt{4-x^2}}$   
(c)  $\frac{1}{\sqrt{4-x^2}}$ 

 $(d) \frac{-1}{\sqrt{4-3}}$ Q30.

If  $f(x) = \log_x^2(\log x)$ , then f(e) is

- (a) 0
- (b) 1
- $(c)\frac{1}{e}$

$$(d)\frac{1}{2e}$$

Q31.

If  $f(x) = e^x$  and  $g(x) = \log_e x$ , then (gof|(x)) is

- (e) 0
- (f) 1
- (g) e
- (h) 1 + e

#### Q32.

If  $y = x^{x - \infty}$ , then  $x(1 - y \log x) \frac{dy}{dx}$  is equal to (i)  $x^2$ (j)  $y^2$ (k)  $xy^2$ (l)  $x^2y$ 

#### Q33.

The derivative of  $\sin x$  with respect to  $\log x$  is

(m)cos x

(n) x cos x

(o) 
$$\frac{\cos x}{\log x}$$

$$(p)\frac{1}{x}\cos x$$

Q34.

If 
$$y = Ae^{5x} + Be^{-5x}$$
 then  $\frac{d^2y}{dx^2}$  is equal to  
(q) 25y  
(r) 5y  
(s) -25y  
(t) 10y

Q35. A function 'f is said to be continuous at x = a, if

$$\frac{1}{(x-1)^2}$$

(a)  $\lim_{x \to a} f(x)$  exists

- (b)  $\lim_{x \to a^-} f(x)$  does not exist
- (c) f(a) exists
- (d) none of these

#### Q36.

State which of the following is continuous as well as differentiable for  $x \in R$ 

- (a) |x|
- (b) [x]
- (c) polynomial function
- (d) sgn (*x*)

Q37. Derivative of  $\frac{x}{x-1}$  with respect to *x*, is

(a) 2

(b) 
$$\frac{2x-1}{(x-1)^2}$$
  
(c)  $\frac{-1}{(x-1)^2}$ 

(b) None of the above

#### Q38.

Derivative of sin x with respect to log x, is

(a) 
$$\frac{x}{\cos x}$$

(b)  $\frac{\cos x}{x}$ 

(c) x cos x

(d)  $x^2 \cos x$ 

Q39.

State the function which is continuous for all  $x \in R$ .

*(u)* sin *x* 

(v) 
$$\frac{x^2 - 25}{x - 5}$$

(w)[x]

Q40.

The function 'f' defined by  $f(x) = \begin{cases} \frac{x^3 - 8}{x - 2}, & x \neq 2\\ 12, & x = 2 \end{cases}$  is

(a) not continuous at x = 2

- (b) continuous at x = 2
- (c) not continuous at x = 3
- (d) not continuous at x = -2

Q41. If 
$$x = at^2$$
,  $y = 2at$ , then  $\frac{d^2y}{dx^2}$  is  
(a)  $\frac{1}{t}$   
(b)  $-\frac{1}{t^2}$   
(c)  $at^2$   
(e)  $\frac{-1}{2at^3}$ 

Sample Question Paper 2021-22 Term 1 Subject: Physics (042)

Time: 90 Minutes

General Instructions:

- 1. The Question Paper contains three sections.
- 2. Section A has 25 questions. Attempt any 20 questions.
- 3. Section B has 24 questions. Attempt any 20 questions.
- 4. Section C has 6 questions. Attempt any 5 questions.
- 5. All questions carry equal marks.
- 6. There is no negative marking.

#### SECTION A

This section consists of 25 multiple choice questions with overall choice to attempt any 20 questions. In case more than desirable number of questions are attempted, ONLY first 20 will be considered for evaluation.

- The unit of electrical permittivity is

   (a) C<sup>2</sup>/N-m<sup>2</sup>
   (b) N-m<sup>2</sup>/C<sup>2</sup>
   (c) N/C
   (d) N-V/m<sup>2</sup>
- 2. The force of interaction between two charges  $q_1 = 6 \ \mu\text{C}$  and  $q_2 = 2 \ \mu\text{C}$  is 12 N. If charge  $q = -2 \ \mu\text{C}$  is added to each of the charges, then the new force of interaction is (a)  $2 \times 10^{-7}$ N (b) zero

(c) 30 N	(d) 2 X 10 <sup>-3</sup> N
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3. A charge *q* is placed at the centre of the line joining two equal charges *Q* and *Q*. The system of the three charges will be in equilibrium, if *q* is equal to

(a) – Q/2	(b) – Q/4
(c) + <i>Q</i> /4	(d) + Q/2

4. The dipole moment of a dipole in an uniform external field  $\mathbf{E}$  is  $\mathbf{p}$ , then the torque ( $\tau$ ) acting on the dipole is

(a)  $\tau = \mathbf{p} \times \mathbf{E}$  (b)  $\tau = \mathbf{p} \cdot \mathbf{E}$ (c)  $\tau = 2(\mathbf{p} + \mathbf{E})$  (d)  $\tau = (\mathbf{p} + \mathbf{E})$ 

5. An electrical dipole is placed in an uniform electric field with the dipole axis making an angle  $\theta$  with the direction of the electric field. The orientation of the dipole for stable equilibrium is

Max. Marks 35

(a) π/6	(b) π/3
(c) 0	(d) π/2

6. Two spheres have their surface charge densities in the ratio of 2:3 and their radii 3:2. The ratio of the charges on them is .....

(a) 3:2	(b) 4:2
(c) 2:3	(d) 2:4

7. Choose the incorrect statement. Equipotential surfaces

(a) are closer in regions of large electric fields compared to regions of lower electric fields.

- (b) will be more crowded near sharp edges of a conductor.
- (c) will be more crowded near regions of large charge densities.

(d) will always be equally spaced.

8. Two bulbs of 40W and 60W are connected to 220V line, the ratio of resistance will be (a) 4:3 (b) 3:4

(4) 1.5	(5) 5.1
(c) 2:3	(d) 3:2

9. In a Wheatstone bridge circuit,  $P = 75 \Omega$ ,  $Q = 8 \Omega$ ,  $R = 12 \Omega$  and  $S = 7 \Omega$ . Find the additional resistance to be used in series with S, so that the bridge is balanced.

(a) 6.72 Ω	(b) 7.62 Ω
(c) 2.67 Ω	(d) 6.27 Ω

10. The potential difference  $(V_A - V_B)$  between the points A and B in the given figure is

$\begin{array}{cccc} V_A & 2A & 2\Omega \\ \bullet & & & & \\ A & & & & \\ \end{array}$	3V + -	1Ω 	V <sub>B</sub>
(a) – 3V	(b) + 3V		
(c) + 6V	(d) + 9V		

11. The figure below shows a 2.0 V potentiometer used for the determination of internal resistance of a 2.5 V cell. The balance point of the cell in the open circuit is 75 cm. When a resistor of 10 Ω is used in the external circuit of the cell, the balance point shifts to 65 cm length of potentiometer wire. The internal resistance of the cell is



12. If 2 A current is flowing in the shown circuit, the potential difference ( $V_B - V_D$ ) in balanced condition is



13. Drift velocity  $v_d$  varies with the intensity of electric field as per the relation

(a) $v_d \propto E$	(b) <i>v<sub>d</sub></i> ∝ <i>1/E</i>
(c) $v_d$ = constant	(d) $v_d \propto E^2$

14. The drift velocity of the electrons in a copper wire of length 2 m under the application of a potential difference of 220 V is 0.5 ms<sup>-1</sup>. Their mobility (in m<sup>2</sup> V<sup>-1</sup>s<sup>-1</sup>)

(a) 2.5 x 10 <sup>-3</sup>	(b) 2.5 x 10 <sup>-2</sup>
(c) 5 x 10 <sup>2</sup>	(d) 5 x 10 <sup>-3</sup>

15. A circular coil of wire consisting of 100 turns, each of radius 8.0 cm carries a current of 0.40A. What is the magnitude of the magnetic field *B* at the centre of the coil?

(a) π x 10 <sup>-3</sup> T	(b) 2 π x 10 <sup>-4</sup> T
(c) π x 10 <sup>-4</sup> T	(d) Zero

16. The current in the windings on a toroid is 2.0 A. There are 400 turns and the mean circumferential length is 40 cm. If the inside magnetic field is 1.0 T, the relative permeability is near about

(a) 100	(b) 200
(a) 300	(b) 400

17. A galvanometer has a resistance of 100 Ω. A potential difference of 100 mV between its terminals gives a full scale deflection. The shunt resistance required to convert it into an ammeter reading upto 5 A is

(a) 0.01 Ω	(b) 0.02 Ω
(c) 0.03 Ω	(d) 0.04 Ω

18. The angle of dip at a certain place on the earth is 60° and the magnitude of the earth's horizontal component of magnetic field is 0.26 G. The magnetic field at the place on the earth is(a) 0.13 G(b) 0.26 G

(a) 0.15 0	(b) 0.20 0
(c) 0.52 G	(d) 0.65 G

19. Angle of dip is maximum at

(a) pole(b) equator(c) Both (a) and (b)(d) Neither (a) nor (b)

20. Lenz's law of electromagnetic induction corresponds to the law of conservation of

- (a) charge (b) energy
- (c) momentum (d) angular momentum

21. The self-inductance of a coil having 500 turns is 50 mH. The magnetic flux through the cross-sectional area of the coil while current through it is 8mA, is found to be

(a) 4 x 10 <sup>-4</sup> Wb	(b) 0.04 Wb
(c) 4 µWb	(d) 40 mWb

22. The core of a transformer is laminated to reduce ......

(a) flux leakage	(b) output power
(c) hysteresis	(d) eddy current

23. A sinusoidal voltage of peak value 300 V and an angular frequency  $\omega = 400$  rads <sup>-1</sup> is applied to series *L-C-R* circuit, in which *R* = 3  $\Omega$ , *L* = 20 mH and *C* = 625  $\mu$ F. The peak current in the circuit is

- (a) 30√2 A (b) 60 A
- (c) 100 A (d) 60√2 A
- 24. Alternating current is transmitted to distant places
  - (a) at high voltage and low current
  - (b) at high voltage and high current
  - (c) at low voltage and low current
  - (d) at low voltage and high current

25. When the frequency of an AC circuit is doubled, then the capacitive reactance will be ......

- (a) halved (b) doubled
- (c) squared

#### SECTION B

(d) tripled

# This section consists of 24 multiple choice questions with overall choice to attempt any 20 questions. In case more than desirable number of questions are attempted, ONLY first 20 will be considered for evaluation.

26. Two unlike charges of the same magnitude *Q* are placed at a distance *d*. The intensity of the electric field at the centre of the line joining the two charges, is

(a) zero	(b) 8Q/ 4πε <sub>0</sub> d <sup>2</sup>
(c) 6 <i>Q/</i> 2πε <sub>0</sub> <i>d</i> <sup>2</sup>	(d) 4 <i>Q/</i> 4πε <sub>0</sub> <i>d</i> <sup>2</sup>

27. What is the angle between the electric dipole moment and the electric field strength due to it on the equatorial line?

(a) 0°	(b) 90°
(c) 180°	(d) None of the above

28. An infinite line charge produces a field of 18 x 10  $^4$  N/C at 0.02 m. The linear charge density

is

(a) 2 x 10 <sup>-7</sup> C/m	(b)10 <sup>-8</sup> C/m
(c) 10 <sup>7</sup> C/m	(d) 10 <sup>-4</sup> C/m

29. A metallic hollow spherical surface of radius 5 cm is charged such that the potential on its surface is 10 V. The potential at the centre is

- (a) zero
- (b) 10 V
- (c) same as at a point 5 cm away from the surface
- (d) same as at a point 25 cm away from the surface

#### 30. Capacitance between points A and B is



31. A capacitor is discharged by a battery, the battery is removed and another identical uncharged capacitor is connected in parallel. The total electrostatic energy of resulting system

- (a) increases by a factor of 4
- (b) decreases by a factor of 2
- (c) remains the same
- (d) increases by a factor of 2

32. The temperature coefficient of resistance of an alloy used for making resistors is

- (a) small and positive (b) small and negative
- (c) large and positive (d) large and negative

33. Long wire of the potentiometer gives lower value of ..... which increases sensitivity of potentiometer.

- (a) resistance (b) potential gradient
- (c) electric potential (d) heat dissipation

34. During charging of a cell terminal voltage is ...... than emf of cell.

- (a) smaller (b) greater
- (c) same (d) zero

35. In the electrical circuit shown, each cell has an emf of 2 V and internal resistance is 1  $\Omega$ . The external resistance is 2  $\Omega$ . The value of the current *I* is (in ampere)



36. The resistance of a wire is *R* ohm. If it is melted and stretched to *n* times its original length, its new resistance will be

(a) <i>nR</i>	(b) <i>R/n</i>
(c) <i>n</i> <sup>2</sup> <i>R</i>	(d) <i>R/n</i> <sup>2</sup>

#### 37. Current through the 5 $\Omega$ resistor is



38. When a current carrying conductor of length *l* is placed parallel to the magnetic field, the magnitude of force due to current carrying conductor is equal to

(a) zero	(b) <i>IlB</i>	
(c) <i>IlB</i> /2	(d) – <i>IlB</i>	

39. Two long conductors, separated by a distance d carry currents  $I_1$  and  $I_2$  in the same direction. They exert a force F on each other. Now, the current in one of them is increased to two times and its direction is reversed. The distance is also increased to 3d. The new value of the force between them is

(a) – <i>F</i> /3	(b) <i>F</i> /3
(c) 2 <i>F</i> /3	(d) – 2 <i>F</i> /3

40. The full scale deflection current of a galvanometer of resistance 1  $\Omega$  is 5 mA. What is the value of resistance *R*, which is connected in series to convert it into a voltmeter of range 5V?

(a) 99 Ω	(b) 999 Ω
(c) 1000 Ω	(d) 100 Ω

41. A charged particle enters a magnetic field *B* with its initial velocity making an angle of 45° with *B*. The path of the particle will be ......

(a) straight line	(b) a circle
(d) an ellipse	(d) a helix

42. Equal current is being passed through two very long and straight parallel wires in the same direction. They will ...... Each other.

(a) attract(b) repel(c) Both (a) and (b)(c) None of the above

43. An electron of charge *e* moves I a circular orbit of radius *r* around the nucleus at a frequency *v*. The magnetic moment associated with the orbital motion of electron is

(a) π <i>ver</i> <sup>2</sup>	(b) π <i>vr²/e</i>
(c) π <i>ve/r</i>	(d) π <i>er²/v</i>

44. Which of the following statement (s) is/are correct with respect of magnetic lines of forces?

(a) Magnetic lines of forces are discontinuous curves.

(b) Magnetic lines of forces do not intersect to each other.

(c) Magnetic lines of forces always enter into south pole from its outside region.

(d) Both (b) and (c)

#### 45. Given below are two statements labelled as Assertion (A) and Reason (R)

Assertion The self-induced emf is also called the back emf.

**Reason** The self-induced emf opposes any change in the current in a circuit.

Select the most appropriate answer from the options below:

(i) Both A and R are true and R is the correct explanation of A.

(ii) Both A and R are true but R is not the correct explanation of A.

(iii) A is true and R is false.

(iv) A is false and R is also false.

#### 46. Given below are two statements labelled as Assertion (A) and Reason (R)

**Assertion** When coil in galvanometer with metallic core oscillates, then the electromagnetic damping occurs.

**Reason** Eddy currents generated in the core opposes the motion and brings the coil to rest quickly.

Select the most appropriate answer from the options below:

(i) Both A and R are true and R is the correct explanation of A.

(ii) Both A and R are true but R is not the correct explanation of A.

(iii) A is true and R is false.

(iv) A is false and R is also false.

**Assertion** When coil in galvanometer with metallic core oscillates, then the electromagnetic damping occurs.

**Reason** Eddy currents generated in the core opposes the motion and brings the coil to rest quickly.

#### 47. Given below are two statements labelled as Assertion (A) and Reason (R)

Assertion Average value of current in half the cycle of an AC circuit cannot be zero.

**Reason** For positive half cycle average value of current is  $i_0/\pi$ , where  $i_0$  is the peak value current.

Select the most appropriate answer from the options below:

(i) Both A and R are true and R is the correct explanation of A.

(ii) Both A and R are true but R is not the correct explanation of A.

(iii) A is true and R is false.

(iv) A is false and R is also false.

#### 48. Given below are two statements labelled as Assertion (A) and Reason (R)

**Assertion** Capacitor serves as a barrier for DC and offers an easy path to AC.

**Reason** Capacitive reactance is directly proportional to frequency.

Select the most appropriate answer from the options below:

(i) Both A and R are true and R is the correct explanation of A.

(ii) Both A and R are true but R is not the correct explanation of A.

(iii) A is true and R is false.

(iv) A is false and R is also false.

#### 49. Given below are two statements labelled as Assertion (A) and Reason (R)

**Assertion** At resonance, power of *L*-*C*-*R* series circuit is zero. **Reason** At resonace,  $X_C > X_L$ .

Select the most appropriate answer from the options below:

(i) Both A and R are true and R is the correct explanation of A.

(ii) Both A and R are true but R is not the correct explanation of A.

(iii) A is true and R is false.

(iv) A is false and R is also false.

#### SECTION C

This section consists of 6 multiple choice questions with overall choice to attempt any 5 questions. In case more than desirable number of questions are attempted, ONLY first 5 will be considered for evaluation.

50. A point charge + 10  $\mu$ C is at a distance 5 cm directly above the centre of a square of side 10 cm, as shown in figure. What is the magnitude of the electric flux through the square?



51. In the figure shown, the effective capacitance between the points *A* and *B*, if each has capacitance *C*, is



#### Case study: Read the following paragraph and answer the questions:

#### **Electrical Resonance**

Electrical resonance is said to take place in a series *L*-*C*-*R* circuit when the circuit allows maximum current for a given frequency of the source of alternating supply for which capacitive reactance becomes equal to the inductive reactance. Impedance of this *L*-*C*-*R* circuit is minimum and hence current is maximum.

Resonant circuits are used to respond selectively to signals of a given frequency while discriminating against signals of different frequencies. If the response of the circuit is more narrowly peaked around the chosen frequency, we say that the circuit has

### higher "selectivity or sharpness". This sharpness is measures with the help of *Q*-factor.

52. Bandwidth of	the resonant L-C	<i>C-R</i> circuit is	
(a) <i>R/L</i>	(b) <i>R/2L</i>	(c) <i>2R/L</i>	(d) <i>4R/L</i>

53. In a series *L*-*C*-*R* circuit, the capacitance *C* is changed to 4 *C*. To keep the resonant frequency same, the inductance must be changed by

(a) 2L (b) L/2 (c) 4L (d) L/4

54. In non-resonant circuit, what will be the nature of the circuit for frequencies higher than the resonant frequency?

(a) Resistive (b) Capacitive (c) Inductive (d) None of these

Figure shows a series L-C-R circuit, connected to a variable frequency 200 V source.  $C = 80 \ \mu\text{F}$  and  $R = 40 \ \Omega$ . The source frequency which drives the circuit at resonance is



55.

	CHEMISTRY SAMPLE PAPER-4
1.	<ol> <li>Practice paper 5General Instructions:</li> <li>The question paper contains three sections.</li> <li>Section-A has 25 questions. Attempt any 20 questions.</li> <li>Section-B has 24 questions. Attempt any 20 questions.</li> <li>Section-C has 6 questions. Attempt any 5 questions.</li> <li>All questions carry equal marks.</li> </ol>
	There is no negative marking SECTION A
	1) I needgelengthoffheunitcellintermsoftheradiusofspheresconstitutingb odycentredcubicunitcell a) $a = 4r/\sqrt{3}$ b) $a=2r$ c) $a=4r$ d) $a=2\sqrt{2}r$
2.	<ul> <li>2) Graphitecannotbeclassifiedas</li> <li>a) Networksolid</li> <li>b) conductingsolid</li> <li>c) ionicsolid</li> <li>d) covalentsolid</li> </ul>
3.	<ul> <li>3) Whichofthefollowingstatementsisnottrueaboutamorphoussolid s?</li> <li>a) Theyareanisotropicinnature</li> <li>b) Onheatingtheymaybecomecrystallineoncertaintemperature</li> <li>c) Theymaybecomecrystallineonkeepingforlongtime</li> <li>d) Amorphoussolidscanbemouldedbyheating</li> </ul>
4.	4) Schottkydefectisgenerallyappearsin a) KCl b) Cscl c) NaCl d) allofthese
5	$\begin{array}{l} \text{Onmixingo} 10 \textit{m'}_{facetonewitho} 40 \textit{m'} \\ \text{fchloroformthetotalvolumeofsolutionis} \\ a_{)} < 50 \textit{m'} \\ b_{)} > 50 \textit{m'} \\ c) \text{equalto50ml} \\ d) \text{cannotbepredicted} \end{array}$
6	AmixtureofBezene andToluene forms a)Anidealsolution b)NonIdealsolution c)Suspension d)Emulsion

CHEMISTRY SAMPLE PAPER-4

7	.The relationship between osmotic pressure at 273 K when 10 gglucose (P1), 10 g urea(P2) and 10 g sucrose(P3) are dissolvedin250mlofwateris 1)P1>P2>P3 2)P3>P1>P2 3)P2>P1>P3 4)P2>P3>P1
8	<ul> <li>.anaqueoussolutionofethanolinwaterhasvapourpressure</li> <li>1) equaltothewater</li> <li>2) equaltothatofethanol</li> <li>3) morethanthatofwater</li> <li>4) lessthanthatofwater</li> </ul>
9	Whichofthefollowingisnottetrahedral?a.S F4 b. SiCl4 c. NH4+ d. SO4-2
10	Which of the following statement is true?a.Hydrolysis of XeF6 is a redox reactionb.XenonFluoridesarenotreactive c.HeandNeformscompoundswithhighestelectronegativefluorined.lo nizationenthalpyofdioxygenisveryclosetoXenon
11	IfchlorinegasispassedcoldSodiumHydroxidesolution,twochan ges in Oxidation state of chlorine happen , they area.+1,-1 b.+1,+1 c1,-1 d.0,1
12	Whichstatementistrue a.XenonFluoridesareunreactive b.XenonFluoriddesarehighlyreactiveandreadilyevenbytracesofwater c.Neon forms compounds only with fluorined.Xenonfluoridesundergodisproportion ation.
13	Whichofthefollowingdon'texista.HOCl2 b. HOBr2 c. HOF2 d. HOl2
14	ThereactionoftoluenewithchlorineinpresenceofFeCl3givespredominantly. (a) amixtureofo-andp-chlorotoluene (b) benzylchloride (c) m-chlorotuluene (d) benzoylchloride

15	$\label{eq:action} \begin{array}{l} \mbox{Arrangethefollowingcompoundsin-decreasingorderoftheirboilingpoints} \\ (i) CH3Br \\ (ii) CH3CH2Br \\ (iii) CH3CH2CH2Br \\ (iv) CH2CH2CH2CH2Br \\ (a)(i) > (ii) > (iii) > (iv) \\ (b)(iv) > (iii) > (ii) > (i) \\ (b)(iv) > (iii) > (ii) > (i) \\ (c)(i) > (iii) > (ii) > (iv) \\ (d)(iii) > (iv) > (i) > (ii) \\ \end{array}$
16	Alkylhalidesareinsolubleinwaterthoughtheyarepolarbecause (a) theyreactwithwatertogivealcohols (b) C-Xbondcannotbebrokeneasily (c) theycannotformhydrogenbondswithwater (d) theyarestablecompoundsandarenotreactive
17.	Methyl bromide reacts with AgF to give methyl fluoride and silverbromide.Thisreactioniscalled (a) Fittigreaction (b) Swartzreaction (c) Wurtzreaction (d) Finkelsteinreaction
18	InSN2reactionswiththesequenceofbondbreakingandbondformationisas follows (a) bondbreakingisfollowedbyformation (b) bondformationisfollowedbybreaking (c) bondbreakingandformationaresimultaneously (d) bondbreakingandformationtakeplacerandomly
19	Whichofthefollowingisthemostreactivetowardsnucleophilicsubstitutionr eaction? (a) CICH2–CH=CH2 (b) CH2=CH-CI (c) CH3CH=CH-CI (d) C6H5CI
20	Phenolwhentreatedwithexcessofbrominewatergivesawhiteprecipitateof (a) 2,4,6-tribromophenol (b) o-bromophenol (c) p-bromophenol (d) bromobenzene

CHEMISTRY SAMPLE PAPER-4

21	ThereactionbetweenphenolandchloroforminthepresenceofaqueousNa OHis (a) nucleophilicsubstitutionreaction (b) electrophilicadditionreaction (c) electrophilicsubstitutionreaction (d) nucleophilicadditionreaction 22)InSN2reactionswiththesequenceofbondbreakingandbondformationis asfollows (a) bondbreakingisfollowedbyformation (b) bondformationisfollowedbybreaking (c) bondbreakingandformationaresimultaneously (d) bondbreakingandformationtakeplacerandomly	
23	The most suitable reagent for the conversion of RCH2OH $\rightarrow$ RCHOis (a) K2Cr2O7 (b) CrO3 (c) KMnO4 24)PCCWhichofthefollowingisthemostreactivetowardsnucleophilicsubstit utionreaction? a)CICH2–CH=CH2 b)CH2=CH-CI c)CH3CH=CH-CI (d) C6H5CI	
25	.Tertiarybutylalcoholgivestertiarybutylchlorideontreatmentwith (a) ConcHCl/anhydrousZnCl3 (b) KCN (c) NaOCl (d) Cl2 (e)	
i		
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	Section :b	
	PASSAGE :Due to intermolecular hydrogen bonding, the boilingpoints of alcohols and phenols are much higher than those ofcorresponding halo alkanes, haloarenes, aliphatic and aromatichydrocarbons. Among isomeric alcohols, the boiling points follow theorder: primary > secondary > tertiary. Boiling points of ethers aremuchlowerthanthoseofisomericalcohols. Thesolubilityofalcoholsin waterdecreasesasthemolecularmassofalcoholsincreases. Thesolubilit yofphenolsinwaterismuchlowerthanthatofalcohols. Lower ethers such as dimethyl ether and ethyl methyl ether aresolubleinwater, butthesolubilitydecreasesasthemolecularmassincr eases. In these questions a statement of assertion followed by astatementofreasonisgiven. Choose the correctans werout of the followingchoices.	
	<ul> <li>(a) Assertionandreasonbotharecorrectstatementsandreasoniscorre ctexplanationforassertion.</li> <li>(b) Assertionandreasonbotharecorrectstatementsbutreasonisnotco rrectexplanationforassertion.</li> <li>(c) Assertioniscorrectstatementbutreasoniswrongstatement.</li> <li>(d) Assertioniswrongstatementbutreasoniscorrectstatement.</li> <li>26) Assertion: Alcohols have higher boiling points than ethers ofcomparablemolecularmasses.</li> <li>Reason:Alcoholsandethersareisomericinnature.</li> </ul>	
27	Assertion: The solubility of phenols in water is much lower thanthatofalcohols. Reason:PhenolsdonotformH-bondswithwater.	
28	Assertion : Among n-butane, ethoxyethane,1-propanol and1- butanol, theincreasing order of boiling points is,1-butanol <1- propanol <ethoxyethane<n-butane. Reason:Boilingpointincreaseswithincreaseinmolecularmass.</ethoxyethane<n-butane. 	
29	Assertion: Dimethyl ether and diethyl ether are soluble in water.Reason: As the molecular mass increases, solubility of ethers inwaterdecreases.	

CHEMISTRY SAMPLE PAPER-4

	QUESTIONSBASEDONASSERTIONANDREASONTYPE Directions: Assertion (A) followed by astatementofReason(R)isgiven.Choosethecorrectansweroutoft hefollowingchoices.(a) Assertion(A)andReason(R)botharecorrectstatements,andReas on(R)iscorrectexplanationforAssertion(A)(b) Assertion(A)andReason(R)botharecorrectstatementsbutReas on(R)isnotcorrectexplanationforAssertion(A)(c) Assertion(A)iscorrectstatement,butReason(R)iswrongstate ment(d) Assertion(A)iswrongstatement,butReason(R)iscorrectstate ment30. Assertion (A): Glucose gets oxidized to gluconic acid onreactionwithmildoxidizingagentlikebrominewater. Reason (R): Glucose contains a keto group
31	. Assertion (A): Glucose is correctly named as D- (+)-glucose.Reason (R): 'D' before the name of glucose represents itsdextrorotatorynature
32	Assertion (A): The two cyclic hemiacetal forms of glucose,α- formandβformarecalledanomers Reason (R): Anomers differ only in the configuration of the hydroxylgroupatC-1
33	. Assertion (A):Fructose is a keto hexose.Reason (R):It has aldehyde functional group
34	Assertion(A):PurinebasespresentinDNAareAdenineandGuanine Reason(R):ThebaseThymineispresentinRNAwhilebaseuracilispres entinDNA

35	

		Match the items of column 1 and 2Column1 (A) CH3—CH—CH3 halideX (B) C6H5—X (C) CH2=CH—CH2—X (D) CH2=CH—CH2—X (a) A–P,B–Q,C–S,D–P (b) A–S,B–R,C–Q,D–P (c) A–Q,B–P,C–S,D–R (d) A–P,B–S,C–R,D–Q	<b>column Column2</b> P. Aryl Q.Alkylhalide R.Vinylhalide S.Allylhalide
		<ul> <li>36)MatchtheitemsofColumnlandC Columnl</li> <li>(i) SN1reaction</li> <li>(ii) Chemicalsinfireextinguisher</li> <li>(iii) Brominationofalkenes</li> <li>(iv) EliminationofHXfromalkylhalide</li> <li>(i)-(c)(ii)-(d)(iii)-(a)(iv)-(b)</li> <li>(i)-(b)(ii)-(d)(iii)-(c)(iv)-(a)</li> <li>(i)-(c)(ii)-(a)(iii)-(d)(iv)-(b)</li> <li>(i)-(a)(ii)-(d)(iii)-(c)(iv)-(b)</li> <li>(i)-(a)(ii)-(d)(iii)-(c)(iv)-(b)</li> </ul>	<b>ColumnII.</b> (a)vic-dibromides (b)Saytzeffrule (c)Racemisation (d)Chlorobromocarbons
37	Ma (v)\$ (vi) (viii (i)-( (i)-( (i)-(	tchtheitemsofColumnlandColumnl Columnl SN1reaction Chemicalsinfireextinguisher Brominationofalkenes i) alide (c)(ii)-(d)(iii)-(a)(iv)-(b) (b)(ii)-(d)(iii)-(c)(iv)-(a) (c)(ii)-(a)(iii)-(d)(iv)-(b) a)(ii)-(d)(iii)-(c)(iv)-(b)	I. ColumnII (a)vic-dibromides (b)Saytzeffrule (c)Racemisation EliminationofHXfromalkylh (d)Chlorobromocarbons

38	TheC-Obondlengthinphenolislessthanthatinmethanolbecauseof a) Partialdoublebondcharacter
	conjugationofunsharedelectronpairofoxygenwiththearomaticring
	c)sp2hybridizedstateofcarbontowhichoxygenisattached
	d) Allofthese.
39	TheC–Obondlengthinetheris a) Sameasthatinalcohols
	b) Greaterthanthatofalcohols
	c)Lessthanthatinalcohols
	d) Noneofthese.
40	Identifytheincorrectstatement a) Thebondangleinetherisgreaterthantetrahedralangle.
	b) Thebondangleinetherislessthantetrahedralangle.
	Thereisstrongrepulsiveinteractionbetweenthetwobulky(– R)groupsinether.
	d)TheC-Obondsinethersarepolar.

A compound (X) containing C, H and O is unreactivetowards sodium. It also does not react with Schiff's reagent.
Onrefluxingwithanexcessofhydroiodicacid,(X)yieldsonlyoneorganicprodu ct (Y). On hydrolysis, (Y) yields a new compound (Z) which canbeconvertedinto(Y)byreactionwithredphosphorousandiodine. Thecompound(Z)onoxidationwithpotassiumpermanganategivesacarbox ylicacid. Theequivalentweightofthisacidis60.
Thefollowingquestionsaremultiplechoicequestion. Choosethemostapprop riateanswer:
41)Thecompound(X)isan

(a) acid
(b) aldehyde
(c) alcohol
(d) ether

42	TheIUPACnameoftheacidformedis (a) methanoicacid	
	(b) ethanoicacid	
	(c) propanoicacid	
	(d) (d)butanoicacid	
43	Passagell Readthepassagegivenbelowandanswerthequestionsthatfollow:In solids, the constituent particles are close packed, leaving the minimumvacantspace, consideringtheconstituentparticlesasidenticalhardsp eresandbuildupthethreedimensionalstructureinthreesteps. a) closepackingone-dimension b) closepackingintwo-dimension. Twotypesofvoidsnamelytetrahedralvoidsandoctahedralvoidsinvolvedinclos kedstructures. 1) Whatisthecoordinationnumberinasquareclosepackedstructureintwodime ions? i) 3 ii) 4 iii) 6 iv) 2	h epac ns
44	Thecorrectorderofpackingefficiencyindifferenttypesofunitcellsis i) bcc <fcc>simplecubic ii) fcc<bcc<simplecubic iii) fcc&gt;bcc&gt;simplecubic iv) fcc<bcc>simplecubic</bcc></bcc<simplecubic </fcc>	
45	Thetotalnumberoftetrahedralvoidsinthefacecenteredunitcellis i) 12 ii) 6 iii) 8 iv) 10	

46	Thepercentageofemptyspaceinafacecenteredcubicarrangementis i) 74 ii) 68 iii) 32 iv) 26
47	Whichofthefollowingalsoknownasdislocationdefect? a) Metalexcessdefect b) frenkeldefect c) nonstoichiometricdefect d) schottkydefect

48	Whichofthefollowingcrystalsdoesnotexhibitfrenkeldefect? a) a)ZnS b) Agcl c) KBr d) AgBr
49	Thecrystalwithmetaldeficiencydefectis a) FeO b) NaCl c) Nal d) ZnO

50	SECTION ;C Whattypeofsolid'quartz'is? a) Molecularsolid b) Covalentsolid c) Ionicsolid d) Metallicsolid
51	Whichtypeofsolidconductelectricityinmoltenstatebutnotinsolidstate?. a) Covalent b) metallic c) ionic d) molecular

	PassageIII Readthepassagegivenbelowandanswerthequestionsthatfollow:
	Crystallinesolidscanbeclassifiedindifferenttypesonthebasisofnatureofintermolec ularforcesorbondsthatholdtheconstituentparticlestogether. These are Vander Waals forces, ionic bonds, covalent bonds and metallicbonds.onthisbasisCrystallinesolidsfurtherclassifiedintomolecular,ioni c,metallic and covalent solids. Crystalline solids are anisotropic in naturewhereasamorphoussolidsareisotropicinnature.
	<ol> <li>WhichofthefollowingisnotacharacteristicofaCrystallinesolids?</li> <li>A regular periodically repeated pattern of arrangement of constituent in thecrystallattice</li> <li>Definite and characteristic beat offusion</li> </ol>
52	iii) propertiesofcrystallinesolidslikeelectricalresistanceorrefractiveindexshow differentvalues whenmeasuredalongdifferentdirections iv) propertiesofcrystallinesolidslikeelectricalconductivityorrefractiveindexshow samevalueswhenmeasuredinalldirections
53	CCl4moleculesareheldinthecrystallatticeby i) dipole-dipoleinteractions ii) dispersionforces iii) columbicforces iv) dipole–induceddipoleinteractions
54	Whichofthefollowingisanetworksolid? i) H2O(ice) ii) SO2(solid) iii) diamond iv) I2
55	Thelatticesiteinapurecrystalcannotbeoccupiedby i) ion ii) electron iii) molecule iv) atom





CHEMISTRY SAMPLE PAPER-4

# SAMPLE PAPER - PRACTICE SEF-44 By P.C.HATTIERIEEI



# ELHI PUBLIC SCHOOL ,SAIL TOWNSHIP,RANCHI.

BLUE PRINT: 1. Question paper consist of 60 questions 2.Ch-2- 9 questions [Direct MCQ] 3.Ch-3 -7+1(AR) + 6( Case based)= 14 questions 4.Ch-4 - 2 + 2(AR) = 4 questions 5.Ch-5 - 15+ 1(AR)=16 questions 6.Ch-6 - 17 questions

#### **CHAPTER-2**

Q.1 A diagrammatic view of a typical anatropous ovule is given below. In which of the following option all five parts are correctly identified.



	А	В	С	D	Е
(a)	Funicle	Micropyle	Female	Embryosac	Chalaza
			gametophyte		
(b)	Placenta	Micropyle	Egg	Embryosac	Chalaza
(c)	Raphae	Micropyle	Egg	Embryosac	Chalaza
(d)	Funicle	Micropyle	Nucellus	Embryosac	Chalaza
ANS:	(d)				

### SAMPLE PAPER - PRACTICE SEF-44 By PCHATTERIEF

Q2. The given figure is an enlarged view of one microsporangium of a matured anther. identify A, B and C



- (a) A Endothecium, B Tapetum, C Middle layer
- (b) A Middle layer, B Endothecium, C Tapetum
- (c) A Tapetum, B Middle layer, C Endothecium
- (d) A Endothecium, B Middle layer, C Tapetum ANS: d
- Q.2 Meiosis can be observed in
  - (a) Spore mother cells
  - (b) Microspores
  - (c) Megaspores
  - (d) Tapetal cells

Ans: (a)

- Q.4 Basic differences in between gamete and gametophytes:
  - (a) Gametes are reproductive cells but gametophytes are body cells
  - (b) Gametes are haploid(n) but gametophytes are diploid(2n)

(c) Gametes are developed through meiosis but gametophytes through Intranuclear mitosis.

(d) Gametes and gametophytes are same both are developed through meiosis.

### ANS: (c)

Q.5 Choose the right option in which all the alphabets A,B,C,D and E are correctly identified.



	А	В	С	D	Е
(a)	Antipodal cells	Secondary nuclei	Chalaza	Stigma	Style
(b)	Antipodal cells	Secondary nuclei	Stigma	Chalaza	Style
(c)	Antipodal cells	Secondary nuclei	Style	Stigma	Chalaza
(d)	Antipodal cells	Secondary nuclei	Stigma	Style	Chalaza

ANS: (d)

Q.6 Presence of many embryos(Polyembryony) is a characteristic feature of

(a) Citrus

(b) Mango

(c) Banana (c) None of these.

Ans: (a)

Q.7 Contrivances for self pollination are:

(a) Bisexualality

(b) Homogamy

(c) Cleistogamy

(d) All of these

ANS:-d

Q.8 Given diagram is showing hydrophily of



(a) Vallisneria	(b) Hydrilla

(c) Zostera (d) Lotus

ANS; (b)

Q.9 The phenomenon observed in some plants wherein parts of the sexual apparatus is used for forming embryos without fertilization is called

- (a) Parthenocarpy (b) Apomixis
- (c) Vegetative propagation (d) Sexual reproduction

ANS; (b)

### CHAPTER-3

Q.10 Egg is liberated from ovary in

(b) primary oocyte stage

(c) oogonial stage (d) mature ovum Stage.

ANS: (a)

Q.11 How many sperms are formed from a secondary spermatocyte?

(a) 4	(b) 8
(c) 2	(d) 1.

ANS: (c)

Q.12 Following Fig. depict Human male reproductive system. Find out the different parts under mention as A,B,C,D & E



	А	В	С	D	Е
(a)	Foreskin	Glans penis	Prostate gland	Cowper's	Ejaculatory
				gland	duct
(b)	Penis	Glanspenis	Cowper's	Prostate gland	Bulbourethral
			gland		gland
(c)	Glans penis	Foreskin	Bulbourethral	Prostate gland	Seminal
			gland		vesicle
(d)	Foreskin	Glans penis	Prostate gland	Bulbourethral	Seminal
				gland	vesicle

ANS:(c)

Q.13 Freshly released human egg has

- (a) one Y-chromosome (b) one X-chromosome
- (c) two X-chromosome (d) one X-chromosome and one Y-chromosome.

ANS: (b)

Q.14 Extrusion of second polar body from egg nucleus occurs

- (a) after entry of sperm before completion of fertilization
- (b) after completion of fertilization
- (c) before entry of sperm
- (d) without any relation of sperm entry.

### ANS: (a)

Q.15 Which part of ovary in mammals acts as an endocrine gland after ovulation?

- (a) stroma (b) germinal epithelium
- (c) vitelline membrane (d) Graafian follicle.

### ANS: (d)

Q.16 If mammalian ovum fails to get fertilized, which, one of the following is unlikely?

- (a) corpus luteum will disintegrate
- (b) progesterone secretion rapidly declines
- (c) estrogen secretion further increases
- (d) primary follicle starts developing.

### ANS:(c)

Case based : Srijan Subha is a student of class12th. He also preparing for NEET-2022. He was studying the various stages and details formation of an embryo. He read through various sources and in one book he read that blastula stage comes before the stage of morula. He asks to his teacher in his coaching, and he comes to know that the book has printed wrong. He then agrees to his teacher and agrees to the fact that morula stage come before the blastula stage.

Refer to the passage theme and answer the Answer the following Q. 17 to Q.19 on the basis of given case study.

Q.17 From the following Fig. find out correct matching option regarding A,B,C,D & E

	А	В	С	D	Е
(a)	Morula	4 cells stage	Blatocyst	Gastrula	Oogonium
(b)	Blastula	Morula	Gastrula	Cleavage	Primary
					oocyte
(c)	Cleavage [2 cell	4 cells stage	Morula	Blastocyst	Secondary
	stage]				oocyte
(d)	3 cells stage	Morula	Blastcyst	8cells stage	Secondary
					oocyte

### Ans: (c)

Q.18 Stage of Implantation : [From Fig. given in Q.17]

(a) A (b) B

(c)C (d)D

Ans: (d)

Q.19 Stage of ovulation : [From Fig. given in Q.17]

- (a) C
- (b) D
- (c) E
- (d) B

ANS: (c)

Case Study: Understanding the existence of any form of life has been a very fascinating topic since the beginning of time and scientists made sure that no stone is left unturned. Every living being on this planet, which is a result of sexual reproduction, marks the start of its journey on this planet when a female egg is fertilized with male sperm.

Based on the theme that has been tried to mention in the above passage, Answer the following Q.20 to Q.22 on the basis of given case study.



Q.20 Which layer does the ovum meets a sperm?

- (a) Oolemma (b)Cortical layer
- (c)Corona radiata (d) Zona pellucid

Ans: (c)

Q.21 The site where the process of cleavage starts after the process of fertilization is

- (a) Fallopian tube (b) Uterus
- (c) Clitoris (d) Vestibule

### ANS: (a)

- Q.22 Where does a fertilized egg implants it self?
  - (a) Perimetrium (b)Endometrium
  - (c)Myometrium (d)Pericardium.

### ANS: ( b)

Q.23 ASSERTION: Spermatogenesis starts at the age of puberty.

REASON: There is a significant increase in level of gonadotropin releasing hormone at puberty.

- (a)Both assertion and reason are true, and reason is the correct explanation of assertion.
- (b)Both assertion and reason are true, but reason is not the correct explanation of assertion.
- (c)Assertion is true but reason is false.
- (d) Both assertion and reason are false.

ANS: (a)

### CHPTER-4

Q.24 Withdrawal of which of the following hormones is the immediate cause of menstruation?

- (a) progesterone (b) estrogen
- (c) FSH (d) FSH-RH.

### ANS: (a)

Q.25 'Sex ratio' means:

- (a) Number of males / 1000 females
- (b) Number of females / 1000 males
- (c) Both

(d) None

ANS: (b)

Q.26 ASSERTION: Introduction of sex education in schools should be encouraged.

REASON: This will encourage children to believe in myths about sex related aspects.

- (a)Both assertion and reason are true, and reason is the correct explanation of assertion.
- (b)Both assertion and reason are true, but reason is not the correct explanation of assertion.
- (c)Assertion is true but reason is false.
- (d) If assertion and reason both are false.

ANS: (c)

Q.27 ASSERTION: Saheli, the new oral contraceptive for the females, contains a steroidal preparation

REASON: It is "once in a day" pill with very few side effects.

- (a)Both assertion and reason are true, and reason is the correct explanation of assertion.
- (b)Both assertion and reason are true, but reason is not the correct explanation of assertion.
- (c)Assertion is false but reason is correct.
- (d) If assertion and reason both are false.

ANS: (d)

### CHAPTER-5

Q.28 Match the terms in Column-1 with their description in column-II and choose the correct option

	Column- I		Column-II
(A)	Dominance	(i)	Many genes govern a single character
(B)	Codominance	(ii)	In a heterozygous organism only one
			allele expresses itself
(C)	Pleiotropy	(iii)	In a heterozygous organism both alleles
			express themselves fully
(D)	Polygenic inheritance	(iv)	A single gene influences many characters

	(A)	(B)	(C)	(D)
(a)	(ii)	(i)	(iv)	(iii)
(b)	(ii)	(iii)	(iv)	(i)
(c)	(iv)	(i)	(ii)	(iii)
(d)	(iv)	(iii)	(i)	(ii)

ANS: (b)

Q.29 A gene pair hides the effect of another. The phenomenon is

(a) epistasis	(b) dominance
(c) mutation	(d) none of these.
ANS: (a)	

Q.30 Inheritances of skin colour in humans is an example of

(a) point mutation	(b) polygenic inheritance
(c) codominance	(d) chromosomal aberration

ANS: (b)

- Q.31 In Mendel's experiments with garden pea, round seed shape (RR) was dominant over wrinkled seeds (rr), yellow cotyledon (YY) was dominant over green cotyledon (yy). What are the expected phenotypes in the F<sub>2</sub> generation of the cross RRYY × rryy?
  - (a) round seeds with yellow cotyledons, and wrinkled seeds with yellow cotyledons
  - (b) only round seeds with green cotyledons
  - (c) only wrinkled seeds with yellow cotyledons
  - (d) only wrinkled seeds with green cotyledons.

ANS: (a)

- Q.32 How many different kinds of gametes will be produced by a plant having the genotype AABbCC?
  - (a) two (b) three
  - (c) four (d) nine.

ANS: (a)

Q.33 Lack of independent assortment of two genes A and B in fruit fly Drosophila is due to

- (a) repulsion (b) recombination
- (c) linkage (d) crossing over.

ANS: (c)

- Q.34Which one of the following traits of garden pea studied by Mendel was a recessive feature ?
  - (a) axial flower position (b) green seed colour

(c) green pod colour

(d) round seed shape

ANS: (b)

- Q.35 A gene is said to be dominant if
  - (a) it expresses it's effect only in homozygous state
  - (b) it expresses it's effect only in heterozygous condition
  - (c) it expresses it's effect both in homozygous and heterozygous condition.
  - (d) it never expresses it's effect in any condition.
- ANS: (c)
- Q.36 Independent assortment of genes does not takes place when
  - (a) genes are located on homologous chromosomes
  - (b) genes are linked and located on same chromosome
  - (c) genes are located on non-homogenous chromosome
  - (d) all the above.
- ANS: (b)
- Q.37 If Mendel had studied the seven traits using a plant with 12 chromosomes instead of 14, in what way would his interpretation have been different?
  - (a) He would not have discovered the law of independent assortment
  - (b) He would have discovered sex linkage
  - (c) He could have mapped the chromosome
  - (d)He would have discovered blending or incomplete dominance.

#### ANS: (a)

- Q. 38 Of a normal couple, half the sons are haemophiliac while half the daughters are carriers. The gene is located on
  - (a) X-chromosome of father (b) Y-chromosome of father
  - (c) one X-chromosome of mother (d) both the X-chromosomes of mother.

ANS: (c)

Q.39 A child of O-group has B-group father. The genotype of father will be

(a)  $I^O I^O$  (b)  $I^B I^B$ (c)  $I^A I^B$  (d)  $I^B I^O$ . ANS: (d)

Q.40 Mendel's last law is

(a) segregation	(b) dominance

(c) independent assortment (d) polygenic inheritance.

ANS: (c)

Q.41The F1 plant of the genotype Tt when self-pollinated, produces gametes of the genotype T and t then find out the chances of fertilization takes place through t :

(a) 100%	(b) 1/3 %
(c) $\frac{1}{2}$ %	(d) $\frac{1}{4}$ %

Q.42 From Q.41 result of fertilization shows formation of Zygote and genotypes TT,Tt & tt. Find out the cause of such resultant:

dom fertilization

- (c) Induced fertilization (d) natural fertilization
- Q.43 Assertion: It is experimentally prove that physical association of genes on a chromosome called as linkage and closed genes are linked gene and non closed genes are non linked gene.
  - Reason: Distance between two gene is directly proportion with % of Linkage where as it is inversely proportional with % of Recombination.
  - (a)Both assertion and reason are true, and reason is the correct explanation of assertion.
  - (b)Both assertion and reason are true, but reason is not the correct explanation of assertion.
  - (c)Assertion is true but reason is false.
  - (d)Both assertion and reason are false.

### SAMPLE PAPER - PRACTICE SEF-441 By RCHATTERIEE CHAPTER-6

Q.44 Study the given fig.of Nucleosome. Identify its componental parts indicated by A,B & C.



- (a) A- Octamer of Non Histone, B- Octamer of Histone, C- Single Non Histone
- (b) A- Core, B- 2X[ H<sub>2</sub>A+H<sub>2</sub>B+H<sub>3</sub>+H<sub>4</sub>], C- H1
- (c) A- Core ,B- Histone octamer, C- H<sub>1</sub> Histone
- (d) Both b & c

ANS: (d)

- Q.45 A typical nucleosome contains
  - (a) 154 bp of DNA Helix
    (b) 200 bp of DNA Helix
    (c) 2000bp of DNA Helix
    (d) 100bp of DNA Helix
- ANS: (b)
- Q.46 The packaging of chromatin at higher level requires additional set of proteins that collectively are referred to as.
  - (a) Non-histone Chromosomal (NHC) proteins
  - (b) Histone Chromosomal (HC) proteins
  - (c) Histone and Non histone both chromosomal protein
  - (d) None of these

ANS: (a)

Q.47 Which of the following make 'S' Strain bacteria as virulen?

- (a) Protein coat on their outer surface of the body
- (b) Mucous coat on their outer surface of the body
- (c) Polysaccharide coat on their outer surface of the body
- (d) Both b & c

#### ANS: (d)

- Q.48 What are the three steps method of Hershey Chase Experiment for confirmation of Genetic material as DNA?
  - (a) Step-1 Radio leveling, Step-2 –Blending & Step-3 Centrifugation
  - (b) Step-1- Infestation, Step-2 Infection, Step-3- Blending
  - (c)Step-1 Infection, Step-2-Blending & Step-3 Centrifugation
  - (d) None of these

ANS: (c)

Q.49 Select the correct option:

	Direction of RNA synthesis	Direction of reading of the
		DNA template DNA
		Strand
(a)	5'-3'	5'-3'
(b)	3'-5'	3'-5'
(c)	5'-3'	3'-5'
(d)	3'-5'	5'-3'

ANS: (c)



Q.50 Following Fig. refers to the transcription in Prokaryote. Identify A,B,C & D

- (a) RNA Polymerase, Sigma factor, RNA
- (b) DNA polymerase, Initiation factor, Rho factor, RNA
- (c)RNA polymerase, Rho factor, Sigma factor, RNA
- (d) DNA polymerase, Sigma factor, Rho factor, RNA.

#### ANS; (a)

- Q.51 *Escherichia coli* fully labelled with <sup>15</sup>N is allowed to grow in <sup>14</sup>N medium. The two strands of DNA molecule of the first generation bacteria have
  - (a) different density and do not resemble parent DNA
  - (b) different density but resemble parent DNA
  - (c) same density and resemble parent DNA
  - (d) same density but do not resemble parent DNA.

#### ANS:(a)

- Q.52 Nucleotide arrangement in DNA can be seen by
  - (a) X-ray crystallography (b) electron microscope
  - (c) ultracentrifuge (d) light microscope.

ANS: (a)

- Q.53 In protein synthesis, the polymerization of amino acids involves three steps. Which one of the following is not involved in the polymerisation of protein ?
  - (a) termination (b) initiation
    - (c) elongation (d) transcription.

ANS: (d)

Q.54 There are special proteins that help to open up DNA double helix in front of the replication fork. These proteins are

(a) DNA ligase	(b) DNA topoisomerase I
(c) DNA gyrase	(d) DNA polymerase I.

ANS: (b)

Q.55 If the sequence of bases in DNA is ATTCGATG, then the sequence of bases in its transcript will be

(a)	GUAGCUUA	(b) AUUCGAUG
(c)	CAUCGAAU	(d) UAAGCUAC.

ANS; (d)

Q.56 In three dimensional view the molecule of t-RNA is

(a) L-shaped	(b) S-shaped

(c)Y-shaped (d) E-shaped.

ANS-(a)

Q.57 Amino acid sequence, in protein synthesis is decided by the sequence of

(a) rRNA	(b) tRNA
(c) mRNA	(d) cDNA.

ANS: ( c)

Q.58 During transcription, the DNA site at which RNA polymerase binds is called

(a) promoter(b) regulator(c) receptor(d) enhancer.

ANS: (a)

Q.59 Human genome project was discovered by

- (a) Francis Collins & Roderick
- (b) Watson & Crick
- (c) Beadle & Tatum
- (d) Paul Berg & Wollman.

ANS: (a)

Q.60 DNA Finger printing technique was first developed by:

- (a) Jeffreys, Wilson & Thien
- (b) Boysen & Jensen
- (c) Scleiden & Schwann
- (d) Edward & Steptoe.

ANS: (a)



Delhi Public School, SAIL Township, Ranchi

Practice Paper - IV

Class: XII Session: 2021-22 Computer Science (Code 083) (Theory: Term-1)

Time Allowed: 90 Minutes

Maximum Marks: 35

**General Instructions:** 

- The question paper is divided into 3 Sections A, B and C.
- Section A, consist of 25 Questions (1-25). Attempt any 20 questions.
- Section B, consist of 24 Questions (26-49). Attempt any 20 questions.
- Section C, consist of 6 case study based Questions (50-55). Attempt any 5 questions.
- All questions carry equal marks.

Q.N.	Section-A
	This section consists of 25 Questions (1 to 25). Attempt any 20 questions from this section. Choose the best possible option.
1	Find the invalid identifier from the following
•	a none
	b. address
	c. Name
	d. pass
2	Consider a declaration L = (1, 'Python', '3.14').
	Which of the following represents the data type of L?
	a. list
	b. tuple
	c. dictionary
	d. string
3	Given a Tuple tup1= (10, 20, 30, 40, 50, 60, 70, 80, 90).
	What will be the output of print (tup1 [3:7:2])?
	a. (40,50,60,70,80)
	b. (40,50,60,70)
	c. [40,60]
	d. (40,60)
4	Which of the following option is not correct?
	a. if we try to read a text file that does not exist, an error occurs.
	b. if we try to read a text file that does not exist, the file gets created.
	c. if we try to write on a text file that does not exist, no error occurs.
	d. if we try to write on a text file that does not exist, the file gets
	Created.
5	Which of the following options can be used to read the first line of a text file Myfile.txt?
	a. myfile = open('Myfile.txt');
	b. myfile = open('Myfile.txt','r');
	c. myfile = open('Myfile.txt');        myfile.readline()
	d. myfile = open('Myfile.txt');

6	Assume that the position of the file pointer is at the beginning of 3rd line in a text file. Which
	of the following option can be used to read all the remaining lines?
	a. myfile.read()
	b. myfile.read(n)
	c. myfile.readline()
	d. mvfile.readlines()
7	A text file student txt is stored in the storage device. Identify the correct option out of the
	following options to open the file in read mode.
	i. myfile = open('student.txt'.'rb')
	ii. myfile = open('student.txt'.'w')
	iii myfile = open('student txt' 'r')
	iv myfile = open('student txt')
	a only i
	h both i and iv
	c, both iii and iv
	d both i and iii
8	The return type of the input() function is
Ŭ	a string
	h integer
	c list
	d tuple
Q	Which of the following operator cannot be used with string data type?
3	a +
	a. '
	с. *
	d. /
10	$a_{\rm c}$ , Consider a tuple tupl = (10, 15, 25, and 30). Identify the statement that will result in an
10	error
	a print(tup1[2])
	b $tup1[2] = 20$
	c print(min(tup1))
	d_print(len(tup1))
11	Which of the following statement is incorrect in the context of binary files?
	a Information is stored in the same format in which the information is held in
	memory
	b. No character translation takes place
	c. Every line ends with a new line character
	d. pickle module is used for reading and writing
12	What is the significance of the tell() method?
	a. tells the path of file
	b. tells the current position of the file pointer within the file
	c. tells the end position within the file
	d. checks the existence of a file at the desired location

13	Which of the following statement is true?
	a. pickling creates an object from a sequence of bytes
	b. pickling is used for object serialization
	c. pickling is used for object deserialization
	d, pickling is used to manage all types of files in Python
14	Syntax of seek function in Python is myfile.seek(offset, reference_point) where myfile is
	the file object. What is the default value of reference_point?
	a. 0
	b. 1
	c. 2
	d. 3
15	Which of the following components are part of a function header in Python?
	a. Function Name
	b. Return Statement
	c. Parameter List
	d. Both a and c
16	Which of the following function header is correct?
	a. def cal_si(p=100, r, t=2)
	b. def cal_si(p=100, r=8, t)
	c. def cal_si(p, r=8, t)
	d. def cal_si(p, r=8, t=2)
17	Which of the following is the correct way to call a function?
	a. my_func()
	b. def my_func()
	c. return my_func
	d. call my_func()
18	Which of the following character acts as default delimiter in a csv file?
	a. (colon) :
	b. (hyphen) -
	c. (comma) ,
	d. (vertical line)
19	Syntax for opening Student.csv file in write mode is
	myfile = open("Student.csv","w",newline=").
	What is the importance of powline-"2
	A nowline gets added to the file
	a. A newline yets added to the first line
	c. Empty string gets appended to all lines
	d EQL translation is suppressed
20	What is the correct expansion of CSV files?
20	a Comma Separable Values
	h Comma Separated Values
	c Comma Split Values
	d Comma Separation Values

21	Which of the following is not a function / method of csv module in Python?
	a. read()
	b. reader()
	c. writer()
	d. writerow()
22	Which one of the following is the default extension of a Python file?
	aexe
	bp++
	cpy
	dp
23	Which of the following symbol is used in Python for single line comment?
	a. /
	b. /*
	c. //
	d. #
24	Which of the following statement opens a binary file record bin in write mode and writes
	data from a list lst1 = [1.2.3.4] on the binary file?
	a. with open('record bin'.'wb') as myfile:
	pickle.dump(lst1.mvfile)
	F
	b. with open('record.bin'.'wb') as myfile:
	pickle.dump(mvfile.lst1)
	F
	c. with open('record.bin'.'wb+') as myfile:
	pickle.dump(myfile.lst1)
	d. with open('record.bin','ab') as myfile:
	pickle.dump(myfile,lst1)
25	Which of these about a dictionary is false?
	a) The values of a dictionary can be accessed using keys
	b) The keys of a dictionary can be accessed using values
	c) Dictionaries aren't ordered
	d) Dictionaries are mutable
	Section-B
	This section consists of 24 Questions (26 to 49). Attempt any 20 questions.
26	What is the output of following code:
	T = (100)
	print(T*2)
	a. Syntax error
	b. (200,)
	c. 200
	d. (100,100)

27	Suppose content of 'Myfile.txt' is:
	Twinkle twinkle little star
	How I wonder what you are
	Up above the world so high
	Like a diamond in the sky
	What will be the output of the following code?
	what will be the output of the following code?
	<pre>myrrre = Open( Myrrre.txt ) data = myfile readlines()</pre>
	print(len(data))
	myfile.close()
	a. 3
	b. 4
	c. 5
	d. 6
28	Identify the output of the following Python statements.
	x = [[10.0, 11.0, 12.0], [13.0, 14.0, 15.0]]
	y = x[1][2]
	print(y)
	a. 12.0 b. 13.0
	c. 14.0
	d. 15.0
29	Identify the output of the following Python statements.
	$\mathbf{v} = 2$
	x - z while $x < 9$ .
	<pre>print(x, end='')</pre>
	x = x + 1
	a. 12345678
	b. 123456789
	c. 2345678
	d. 23456789
30	Identify the output of the following Python statements.
	b = 1
	for a in range(1, 10, 2):
	b += a + 2
	print(b)
	a. 51 h 33
	c. 36
	d. 39


	a. jump
	b. break
	c. continue
	d. return
34	What will be the output of the following Python code?
	def add (num1, num2):
	sum = num1 + num2
	sum = add(20, 30)
	print(sum)
	a. 50
	b. 0
	c. Null
	d. None
35	Evaluate the following expression and identify the correct answer.
	16 - (4 + 2) * 5 + 2**3 * 4
	a. 54
	b. 46
	c. 18
	d. 32
36	What will be the output of the following code?
	<pre>def my_func(var1=100, var2=200):</pre>
	var1+=10
	var2 = var2 - 10
	return var1+var2
	print(my_func(50),my_func())
	a. 100 200
	D. 150 300
	C. 250 75
27	0. 200 300
57	what will be the output of the following code?
	value = 50
	der display(N):
	giobal value
	$\frac{1}{10} = 23$
	$\frac{1}{N_0} = \frac{1}{N_0} + \frac{N}{N_0}$
	value = value - N
	print(value, end="#")
	display(20)
	print(value)
	a. 50#50
	b. 50#5
	c. 50#30
	d. 5#50#
	print(value) a. 50#50 b. 50#5 c. 50#30
	d. 5#50#

38	What will be the output of the following code?
	import random
	List=["Delhi","Mumbai","Chennai","Kolkata"]
	for y in range(4):
	x = random.randint(1,3)
	<pre>print(List[x],end="#")</pre>
	a. Delhi#Mumbai#Chennai#Kolkata#
	b. Mumbai#Chennai#Kolkata#Mumbai#
	c. Mumbai# Mumbai #Mumbai # Delhi#
	d. Mumbai# Mumbai #Chennai # Mumbai
39	What is the output of the following code snippet?
	<pre>def ChangeVal(M,N):</pre>
	for i in range(N):
	if M[i]%5 == 0:
	M[i]//=5
	if M[i]%3 == 0:
	M[i]//=3
	L = [25, 8, 75, 12]
	ChangeVal(L,4)
	for i in L:
	<pre>print(i, end="#")</pre>
	a) 5#8#15#4#
	b) 5#8#5#4#
	c) 5#8#15#14#
	d) 5#18#15#4#
40	Suppose content of 'Myfile.txt' is
-	Humpty Dumpty sat on a wall
	Humpty Dumpty had a great fall
	All the king's horses and all the king's men
	Couldn't put Humpty together again
	What will be the output of the following code?
	myfile = open("Myfile.txt")
	record = myfile.read().split()
	print(len(record))
	myfile.close()
	a 24
	b. 25
	c. 26
	d. 27
41	Find the output of the following code:
	Name="PythoN3.1"
	R=""
	for x in range(len(Name)):
1	
	if Name[x].isupper():

	<pre>elif Name[x].islower():</pre>
	R=R+Name[x].upper()
	<pre>elif Name[x].isdigit():</pre>
	R=R+Name[x-1]
	else:
	R=R+"#"
	print(R)
	a. pYTHOn##@
	b. pYTHOnN#@
	c. pYTHOn#@
	d. pYTHOnN@#
42	Suppose content of 'Myfile.txt' is
	Honesty is the best policy.
	What will be the output of the following code?
	myfile = open("Myfile.txt")
	x = myfile.read()
	print(len(x))
	myfile.close()
	a. 5
	b. 25
	c. 26
	d. 27
43	Suppose content of 'Myfile.txt' is
	Culture is the widening of the mind and of the spirit.
	What will be the output of the following code?
	<pre>myfile = open("Myfile.txt")</pre>
	x = myfile.read()
	y = x.count('the')
	print(y)
	myfile.close()
	a. 2
	b. 3
	c. 4
	d. 5
44	What will be the output of the following code?
	x = 3
	<pre>def myfunc():</pre>
	global x
	x+=2
	<pre>print(x, end=' ')</pre>
	<pre>print(x, end=' ')</pre>
	<pre>print(x, end=' ') myfunc()</pre>
	<pre>print(x, end=' ') myfunc() print(x, end=' ')</pre>

	a. 3 3 3	
	b. 3 4 5	
	c. 3 3 5	
	d. 3 5 5	
45	Suppose content of 'Myfile.txt' is	
	Ek Bharat Shreshtha Bharat	
	What will be the output of the following code?	
	<pre>myfile = open("Myfile.txt")</pre>	
	<pre>vlist = list("aeiouAEIOU")</pre>	
	vc=0	
	<pre>x = myfile.read()</pre>	
	for y in x:	
	if(y in vlist):	
	vc+=1	
	print(vc)	
	myfile.close()	
	a. 6	
	b. 7	
	c. 8	
	d. 9	
46	Suppose content of 'Myfile.txt' is	
	Twinkle twinkle little star	
	How I wonder what you are	
	Up above the world so high	
	Like a diamond in the sky	
	I winkle twinkle little star	
	<pre>myfile = open("Myfile.txt") line.exemt</pre>	
	<pre>myfile = open("Myfile.txt")     line_count = 0     line_file.txt</pre>	
	<pre>myfile = open("Myfile.txt")     line_count = 0     data = myfile.readlines()     fam_line_in_data;</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data: if line[0] == LEL:</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':     line_count += 1</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1 print(line_count)</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1 print(line_count) myfile_close()</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1     print(line_count)     myfile.close() a 2</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1         print(line_count)         myfile.close() a.2 b.3</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1         print(line_count)         myfile.close() a.2 b.3 c.4</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1     print(line_count)     myfile.close() a.2 b.3 c.4 d 5</pre>	
	<pre>myfile = open("Myfile.txt") line_count = 0 data = myfile.readlines() for line in data:     if line[0] == 'T':         line_count += 1     print(line_count)     myfile.close() a.2 b.3 c.4 d.5</pre>	



	Section-C				
	Case Study based Questions				
	This section consists of 6 Questions (50 -55) Attempt any 5 questions.				
	Rohit, a student of class 12, is learning CSV File Module in Python. During examination, he has been assigned an incomplete python code (shown below) to create a CSV File 'Student.csv' (content shown below). Help him in completing the code which creates the desired CSV File.				
	<b>C</b> ; 1, 2, 3, 4, 5,	<b>SV File</b> AKSHAY,XII,A ABHISHEK,XII,A ARVIND,XII,A RAVI,XII,A ASHISH,XII,A			
	Incomplete Code				
	import fh = open(,, newline=")	#Statement-1 #Statement-2			
	data = [ ] header = ['ROLL_NO', 'NAME', 'CLASS', 'SE	#Statement-3			
	data.append(header) for i in range(5):				
	roll_no = int(input("Enter Roll Numb name = input("Enter Name : ") Class = input("Enter Class : ")	er : "))			
	rec = []	#Statement-4			
	data.append() stuwriter(data) fh.close()	#Statement-5 #Statement-6			
50	Identify the suitable code for blank sp	pace in the line marked as Statement-1.			
	a) csv file b) CSV c) csv d) cvs				
51	Identify the missing code for blank sp	pace in line marked as Statement-2.			
	a) "Student.csv","wb" b) "Student.csv","w" c) "Student.csv","r" d) "Student.cvs","r"				
52	Choose the function name (with argu	iment) that should be used in the blank space of line			
	marked as Statement-3.				
	a) reader(fh) b) reader(MyFile) c) writer(fh) d) writer(MyFile)				

53	Identify the suitable code for blank space in line marked as Statement-4.
	a) 'ROLL NO' 'NAME' 'CLASS' 'SECTION'
	b) ROLL NO, NAME, CLASS, SECTION
	c) 'roll_no','name','Class','section'
	d) roll_no,name,Class,section
E 4	Identify the quitable and for blank anges in the line marked as Statement 5
54	identity the suitable code for blank space in the line marked as Statement-5.
	a) data
	b) record
	c) rec
	d) insert
55	Choose the function name that should be used in the blank space of line marked as
	Statement-6 to create the desired CSV File?
	a) dump()
	b) load()
	c) writerows()
	d) writerow()

# **DELHI PUBLIC SCHOOL, SAIL TOWNSHIP**

Practice Paper for Term-I Subject: Informatics Practices (Code-065) Class – XII

#### **Time Allowed: 90 minutes**

Maximum Marks: 35

#### **General Instructions:**

The paper is divided into 3 Sections- A, B and C.

Section A, consists of Question 1 to 25 and student need to attempt 20 questions. Section B, consists of Question number 26 to 49 and student need to attempt 20 questions. Section C, consists of Question number 50 to 55 and student need to attempt 5 questions. All questions carry equal marks.

#### Section – A

#### Section A consists of 25 questions, attempt any 20 questions.

- 1. The name "Pandas" is derived from the term:
  - a. Panel Data
  - b. Panel Series
  - c. Python Document
  - d. Panel Data Frame
- 2. The command to install the pandas is:
  - a. install pip pandas
  - b. install pandas
  - c. pip pandas
  - d. pip install pandas
- 3. Python pandas was developed by:
  - a. Guido van Rossum
  - b. Travis Oliphant
  - c. Wes McKinney
  - d. Brendan Eich
- 4. Pandas Series is:
  - a. 2 Dimensional
  - b. 3 Dimensional
  - c. 1 Dimensional
  - d. Multidimensional
- 5. Pandas is a:
  - a. Package
  - b. Language
  - c. Library
  - d. Software
- 6. We can analyse the data in pandas with
  - a. Series
  - b. Data Frame

- c. Both of the above
- d. None of the above

- **7.** Out of the following, which function cannot be used for customization of charts in Python?
  - a. xlabel()
  - b. colour()
  - c. title()
  - d. xticks()
- 8. What is the minimum number of arguments required for plot() function in matplotlib?
  - a. 1
  - b. 2
  - c. 3
  - d. 4

9. Method or function to add a new row in a data frame is:

- a. .loc()
- b. .iloc()
- c. join
- d. add()

**10.** \_\_\_\_\_\_ is the function to save the graph.

- a. Savefig()
- b. Savefigure()
- c. Savegraph()
- d. Savechart()

**11.** A \_\_\_\_\_\_ is a unique data trace of a user's activities, actions, communications or transactions in digital media.

- a. Digital Handprint
- b. Digital Footprint
- c. Offline Footprint
- d. Offline Handprint
- 12. Which of the following is not a type of cybercrime?
  - a. Data theft
  - b. Forgery of online documents
  - c. Damage to data and systems
  - d. Installing antivirus for protection
- **13.** 'F' in FOSS stands for:
  - a. Free
  - b. Forever
  - c. Fire
  - d. Freezing
- 14. Which of the following import statement is not correct?
  - a. import pandas as class12
  - b. import pandas as 1pd
  - c. import pandas as pd1

d. import pandas as pd

- 15. IPR stands for:
  - a. Intelligent Property Rights
  - b. Intellectual Property Reserve
  - c. Intellectual Property Rights
  - d. Intellectual Product Rights
- **16.** Which of the following is not a violation of IPR?
  - a. Plagiarism
  - b. Copyright Infringement
  - c. Patent
  - d. Trademark Infringement
- **17.** While accessing the column from the data frame, we can specify the column name. In case column does not exist, which type of error it will raise:
  - a. Key Error
  - b. Syntax Error
  - c. Name Error
  - d. Runtime Error

**18.** \_\_\_\_\_\_\_\_ is the practice of taking someone else's work or ideas and passing them off as one's own:

- a. Plagiarism
- b. Copyright
- c. Patent
- d. All of the above

**19.** Function to display the first n rows in the DataFrame:

- a. tail (n)
- b. head (n)
- c. top (n)
- d. first (n)
- **20.** Following are the impact of e-waste on the environment. Choose the odd one out.
  - a. Soil Pollution
  - b. Water Pollution
  - c. Air Pollution
  - d. Sound Pollution
- **21.** Abdul deleted all his chats from all his social media accounts, and he thinks that all his traces are deleted completely. Is he right in thinking so?
  - a. Yes
  - b. No
  - c. May be
  - d. Not sure
- 22. The legal and regulatory aspects of the internet refer to.....
  - a. Cyber Space
  - b. Cyber crime
  - c. Criminal law

d. IT act

- 23. Pandas data frame cannot be created using:
  - a. Dictionary of tuples
  - b. Series
  - c. Dictionary of List
  - d. List of Dictionaries

24. Which function will be used to read data from a CSV file into pandas data frame?

- a. readcsv()
- b. to\_csv()
- c. read\_csv()
- d. csv\_read()

25. Which of the following is not an attribute of pandas data frame?

- a. length
- b. T
- c. Size
- d. shape

# <u>Section – B</u>

#### Section B consists of 24 Questions (26 to 49). Attempt any 20 questions.

26. What will be the output of the given code?

```
import pandas as pd
s = pd.Series([1,2,3,4,5],
```

index=['akram','brijesh','charu','deepika','era'])

print(s['charu'])

- a. 1
- b. 2
- c. 3
- d. 4
- **27.** Assuming the given series, named **stud**, which command will be used to print 5 as output?
  - Amit90 Ramesh100 Mahesh50 john67 Abdul89 Name: Student, dtype: int64
  - a. stud.index
  - b. stud.length
  - c. stud.values

d. stud.size

**28.** A social science teacher wants to use a pandas series to teach about Indian historical monuments and its states. The series should have the monument names as values and state names as indexes which are stored in the given lists, as shown in the code. Choose the statement which will create the series:

import pandas as pd

Monument=['Qutub Minar', 'Gateway of India', 'Red Fort', 'Taj Mahal'] State=['Delhi', 'Maharashtra', 'Delhi', 'Uttar Pradesh']

- a. S=df.Series(Monument,index=State)
- b. S=pd.Series(State,Monument)
- c. S=pd.Series(Monument,index=State)
- d. S=pd.series(Monument,index=State)
- **29.** \_\_\_\_\_\_ is a cybercrime in which a target or targets are contacted by email, telephone or text message by someone posing as a legitimate institution to lure individuals into providing sensitive data such as personally identifiable information, banking and credit card details, and passwords.
  - a. Plagiarism
  - b. Phishing
  - c. Cyberstalking
  - d. Hacking
- **30.** Observe the following figure. Identify the coding for obtaining this as output.



- a. import matplotlib.pyplot as plt plt.plot([1,2],[4,5]) plt.show()
- b. import matplotlib.pyplot as plt plt.plot([1,2,3],[4,5,1]) plt.show()
- c. import matplotlib.pyplot as plt plt.plot([2,3],[5,1]) plt.show()
- d. import matplotlib.pyplot as plt plt.plot([1,3],[4,1]) plt.show()

**31.** Read the statements given below and identify the right option to draw a histogram.

**Statement A**: To make a Histogram with Matplotlib, we can use the plt.hist() function. **Statement B**: The bin parameter is compulsory to create histogram.

- a. Statement A is correct
- b. Statement B is correct
- c. Statement A is correct, but Statement B is incorrect
- d. Statement A is incorrect, but Statement B is correct
- **32.** Which graph should be used where each column represents a range of values, and the height of a column corresponds to how many values are in that range?
  - a. plot
  - b. line
  - c. bar
  - d. histogram
- **33.** Suhhani is confused about the free operating system available in the market. Few of her friends suggested a few operating systems. Help her in choosing free operating system for her device:
  - a. Ubuntu
  - b. Windows
  - c. Mozilla Firefox
  - d. Blender
- 34. Consider the following statements with reference to the use of email: Statement 1: Sending threatening messages to a classmate.
  Statement 2: Inviting friends to participate in a school club or sports activity.
  Statement 3: Asking your teacher for help on homework.
  Statement 4: Responding to or forwarding spam emails.

Which of the above statements refer to appropriate use of email?

- a. Statements 1 and 2.
- b. Statements 2 and 3.
- c. Statements 3 and 4.
- d. Statements 2 and 4.

#### **35.** Consider the following series named animal:

L Lion

- B Bear
- E Elephant

T Tiger

W Wolf

dtype: object

Write the output of the command: print(animal[::-3])

- a. L Lion T Tiger dtype: object
- b. B Bear E Elephant dtype: object
- c. W Wolf B Bear dtype: object
- d. W Wolf T Tiger dtype: object
- **36.** Saharsh is a student of class -9 and he is a very frequent user of internet applications. One day he got an unpleasant message on his instant messenger. What do you think he should do?
  - a. ignore it and start chatting to someone else.
  - b. reply back to them and find out what their problem is.
  - c. shut down the computer and hope they'll leave him alone in future.
  - d. go to his parents, teacher, or other trusted adult and let them know that he feels uncomfortable.
- **37.** What is a correct syntax to return the values of first row of a Pandas DataFrame? Assuming the name of the DataFrame is dfRent.
  - a. dfRent[0]
  - b. dfRent.loc[1]
  - c. dfRent.loc[0]
  - d. dfRent.iloc[1]
- **38.** Feasible method (s) to manage e-waste:
  - a. Reduce
  - b. Reuse
  - c. Recycle
  - d. All of the above
- 39. Difference between loc() and iloc().:
  - a. Both are Label indexed based functions.
  - b. Both are Integer position-based functions.
  - c. loc() is label based function and iloc() integer position based function.

d. loc() is integer position based function and iloc() index position based function.

40. Write the output of the given program: import pandas as pd S1=pd.Series([5,6,7,8,10],index=['v','w','x','y','z']) I=[2,6,1,4,6] S2=pd.Series(I,index=['z','y','a','w','v']) print(S1-S2)

a.	
а	0
v	-1.0
W	2.0
х	NaN
У	2.0
z	8.0 dtype:
floate	54
b.	
а	NaN
v	-1.0
W	2.0
х	NaN
У	2.0
Z	8.0 dtype:
floate	54
с.	
V	-1.0
W	2.0
У	2.0
Z	8.0 dtype:
floate	54
d.	
а	NaN
V	-1.0
W	2.0
х	3.0
У	2.0
Z	8.0 dtype:
floate	54

**41.** We should exhibit proper manners and etiquettes while being online. Choose the right net etiquette (s) from the following:

- a. Avoid Cyber Bullying
- b. Respect Other's Privacy
- c. No Copyright violation
- d. All of the above

- **42.** Which command will be used to delete 3 and 5 rows of the data frame. Assuming the data frame name as DF.
  - a. DF.drop([2,4],axis=0)
  - b. DF.drop([2,4],axis=1)
  - c. DF.drop([3,5],axis=1)
  - d. DF.drop([3,5])
- 43. Write the output of the given command: import pandas as pd s=pd.Series([1,2,3,4,5,6],index=['A','B','C','D','E','F']) print(s[s%2==0])

```
a.
 В
        0
 D
        0
  F 0 dtype: int64
b.
 А
        1
  В
        2
  С
        5 dtype:
  int64
c.
 В
        2
 D
        4
 F 6 dtype: int64
d.
  В
        1
  D
        2
  F 3 dtype: int64
```

- **44.** Ritika is a new learner for the python pandas, and she is aware of some concepts of python. She has created some lists, but is unable to create the data frame from the same. Help her by identifying the statement which will create the data frame. import pandas as pd Name=['Manpreet','Kavil','Manu','Ria'] Phy=[70,60,76,89] Chem=[30,70,50,65]
  - a. df=pd.DataFrame({"Name":Name,"Phy":Phy,"Chem":Chem})
  - b. d=("Name":Name,"Phy":Phy,"Chem":Chem) df=pd.DataFrame(d)
  - c. df=pd.DataFrame([Name,Phy,Chem],columns=['Name',"Phy","Chem","Total"])
  - d. df=pd.DataFrame({Name:"Name", Phy :"Phy",Chem: "Chem"})
- **45.** Linux, MySQL and Mozilla Firefox software come under\_\_\_\_\_ category.
  - a. Proprietary
  - b. FOSS
  - c. Freeware
  - d. Shareware

46.	Assuming the given struc	ture, which comma	and will g	ive us the giv	/en output:
		Flight No	Airline	Passenger	

0	1	Indigo	230000
1	2	SpiceJet	12000
2	3	Indian Airlines	240000
3	4	Lufthansa	245000
4	5	Air Asia	210000

Output Required: (3,5)

- a. print(df.shape())
- b. print(df.shape)
- c. print(df.size)
- d. print(df.size())

**47.** Write the output of the given command:

100		-	10 117	
dt1	nc	1.0	'Sal'I	
UIT.			, Jui i	

Consider the given dataframe.

	EName	Sal	Bonus
0	Kavita	50000	3000
1	Sudha	60000	4000
2	Garima	55000	5000

- a. 0 Kavita 50000 3000
- b. 50000
- c. 3000
- d. 50000

48. Consider the following data frame name df

	Name	Age	Marks
0	Amit	15	90.0
1	Bhavdeep	16	NaN
2	Reema	17	87.0

Write the output of the given command:

#### print(df.marks/2)

a.	0	45.0
	1	NaN
	2	43.5
	Nar	me: Marks, dtype: float64
b.	0	45.0
	1	NaN
	2	43
	Nar	ne: Marks, dtype: float64
c.	0	45
	1	NaN
	2	43.5
	Nar	ne: Marks, dtype: float64
d.	0	45.0
	1	0
	2	43.5
	Nar	me: Marks, dtype: float64

**49.** Read the statements given below. Identify the right option from the following for Attribute and method/function.

Statement A: Attribute always ends without parenthesis.

Statement B: Function/Method cannot work without arguments.

- a. Both statements are correct.
- b. Both statements are incorrect.
- c. Statement A is correct, but Statement B is incorrect
- d. Statement A is incorrect, but Statement B is correct

### Section - C

# Section C, consists of 6 Question (50 to 55). Attempt any 5 questions. Case Study

Mr. Sharma is working with an IT company, and he has provided some data. On which he wants to do some operations, but he is facing some problem, help him:

Code: import pandas as pd ResultSheet={ 'Naveen': pd.Series([90, 91, 97], index=['Maths','Science','Hindi']), 'Rehana': pd.Series([92, 81, 96],

```
index=['Maths','Science','Hindi']),'John':
pd.Series([89, 91, 88],
index=['Maths','Science','Hindi']), 'Roja':
pd.Series([81, 71, 67],
index=['Maths','Science','Hindi']), 'Mannat':
pd.Series([94, 95, 99],
index=['Maths','Science','Hindi'])}
DF = pd.DataFrame(ResultSheet) print(DF)
```

#### Output of the above code:

	Naveen	Rehana	John	Roja	Mannat
Maths	90	92	89	81	94
Science	91	81	91	71	95
Hindi	97	96	88	67	99

### Based on the given information, answer the questions NO. 50-55.

**50.** He wants to add a new column with name of student 'Prem' in above data frame choose the right command to do so:

- a. DF['Prem']=[89,78,76]
- b. df['Prem']=[89,78,76]
- c. DF['Prem']=[89,78,76,67]
- d. DF['Name']=[89,78,76]

**51.** He wants to set all the values to zero in data frame, choose the right command to do so:

- a. DF=0
- b. DF[]=0
- c. DF[:]=0
- d. DF[:]==0
- 52.He wants to delete the row of science marks:
  - a. DF.drop('Science', axis=1)
  - b. DF.drop('Science', axis=0)
  - c. DF.drop('Science', axis=-1)
  - d. DF.drop('Science', axis==0)
- **53.** The following code is to create another data frame, which he wants to add to the existing Data frame. Choose the right command to do so:

Sheet1={ 'Aaradhya': pd.Series([90, 91, 97], index=['Maths','Science','Hindi'])} S1=pd.DataFrame(Sheet1)

- a. DF.append(S1,axis=0)
- b. DF.append(S1)
- c. DF.insert(S1)

# d. DF.join(S1)

# **54.** What will be the output of the given command? DF.index=['A','B','C']

a.

		Naveen	Rehana	John	Roja	Mannat
A	Math	90	92	89	81	94
В	Science	91	81	91	71	95
С	Hindi	97	96	88	67	99

b.

	Naveen	Rehana	John	Roja	Mannat
A	90	92	89	81	94
В	91	81	91	71	95
С	97	96	88	67	99

с.

	А	В	С	Roja	Mannat
Math	90	92	89	81	94
Science	91	81	91	71	95
Hindi	97	96	88	67	99

d. Error, Index already exists and cannot be overwritten.

55. What will be the output of the given command?

	Naveen	Rehana	John	Roja	Mannat	
Math	90	92	89	81	94	
Science	91	81	91	71	95	
Hindi	97	96	88	67	99	
print(DF.size)						
a. 15						

b. 18

c. 21d. 23

# **DELHI PUBLIC SCHOOL, RANCHI FINE ART (Painting / Graphics)** SAMPLE PAPER (SET-IV) 2021-22 Class – XII **TERM-1** Time allowed: 01 hours **Maximum Marks: 15**

.....

■ Max. Time Allowed: 60 Minutes (1Hrs.) ■ Marks: 15 **General Instructions:-**► The Question Paper contains three sections: A, B and C.

- ► Section A has 12 questions. Attempt any 10 questions.
- ► Section b has 12 questions. Attempt any 10 questions.
- ► Section C has 6 questions. Attempt any 5 questions.
- ► All questions carry equal marks.
- ► There is no negative marking.

SECTION	N A-	
KNOWL	EDGE / UNDERSTANDING	
(ATTEM)	PT ANY 10)	
1.	When is the Pahari painting style considered to have started?	0.6
	A-1500 A.D	
	B-1780 A.D	
	C-1690 A.D	
	D-1840 A.D	
2.	Theme depicted in Nathdwara Paintings was -	0.6
	A-Love scenes of Radha and Krishna	
	B-Portrait	
	C-Daily life	
	D-Story illustrations	
3.	A postal stamp was issued by the Indian government based on which famous Rajasthani	0.6
	painting?	
	A-Chaugan player	
	B-MaruRagini	
	C-RadhaBaniThani	
	D- Krishna on swing	
4.	Where is Pichwai Art famous?	0.6
	A-Chawand	
	B-Udaipur	
	C-Nathdwara	
	D-Jodhpur	
5.	What is the another name for Kangra painting -	0.6
	A-Rajasthani	
	B-Mughal	
	C-Pahari	
	D-Garhwali	
6.	Nainsukh is a painter of which genre?	0.6
	A- Kangra	
	B-Guler	
	C -Basoli	
	D-Garbwal	

7.	Pahari style was mainly influenced by-	0.6
	A-Mughal style Rajasthani style	
	B-Worldly style (Sansarikaishwarye)	
	C-Inspired by luxury	
	D-Bengal style	
8.	Who was the author of Ain-i-Akbari?	0.6
	A- Abdusamad	0.0
	B- Abul Hasan	
	C- Abul Fazal	
	D- Abul Raza	
0	The colours used in illustration during the Mughal period were made from?	0.6
Э.	A _ Minerals	0.0
	R Chamicals	
	C Soil	
	D Elewer	
10	D- Flower Where is ColCumbed lessted?	0.6
10.	where is Goldumbad located?	<b>U.</b> 0
	A- Golkonda	
	B- Beedar	
	C- Birar	
	D- Bijapur	
11.	The manuscript 'Najum-al-Ulum' contains how many miniatures?	0.6
	A- 896	
	B- 886	
	C- 876	
	D- 866	
12.	Which style flourished in Golconda?	0.6
	A- Deccan style	
	B- Mughal style	
	C- Pal style	
	D- Jain style	
SECTION	N B-	
APPLICA	ATION BASED (ANALYTIC & CALCULATIVE)	
(ATTEMI	PT ANY 10)	
13.	Mewar style paintings have a colour scheme-	0.6
	A- Sufiyana	
	B- Blurred	
	C- Flashy	
	D- Mixed	
14.	He is not a painter of Kishangarh style?	0.6
	A- Amru	
	B- Rukunuddin	
	C- Bhawani Chand	
	D- Bheek Chand	
15.	Sahibdin was a courtier painter of Mewar, name the painting of your course painted by	0.6
101	him?	0.0
	A-MaruRagini	
	B-Radha (BaniThani)	
	C- Chaugan players	
	D Krishna on swing	
16	D- Kiisilla oli Swillg In which style the lines are more important than the selectre?	<b>A C</b>
10.	A Mower style	0.0
	A-IVIEWAI Style	
	D-Naligra Style	
	C-Aberrant style	
	D-Jaipur Style	

17.	In what form are the eyes of women made in the Kangra style?	0.6
	A- Big eyes	
	B-As a fish style	
	C-Like Parwal	
	D-In the form of bow/long and narrow	
18.	Which subject was painted the most in Basohli style?	0.6
	A-BarahMasa	
	B-RaagMala	
	C-Nayikabhed/mughda nayika	
	D-Religious books	
19.	By what names are the Rajput style paintings also known?	0.6
	A- Mughal style	
	B- Pahadi style	
	C- Gujarati style	
	D- Rajasthani or Hindu style	
20.	During which Mughal emperor's rule, maximum numbers of Portrait paintings were	0.6
	painted?	
	A- Akbar	
	B- Jahangir	
	C- Shahjahan	
	D- Yusuf-Adil Shah	
21.	Which Mughal painter is known as 'Raphael of the East'?	0.6
	A-Bihjad	
	B-Mansoor	
	C- Manohar	
	D- Miskin	
22.	Which book describes the ancestors of Akbar?	0.6
	A-Akbar Nama	
	B-Babur Nama	
	C-Shah Nama	
	D-Ain-i-Akbar	
23.	Anwar- i -Suhali and Yusuf-Zulekha are the legends of the period of :-	0.6
	A-Yusuf-Adil Shah	
	B-QuliIntab Shah	
	C- Aurangzeb	
	D-ShahJahan	
24.	Patwa Art belongs to which state?	0.6
	A-West Bengal	
	B-Gujarat	
	C- Rajasthan	
	D-Madhya Pradesh	
SECTION	<u>C-</u>	
HIGHER	A ORDER SKILLS (ATTEMPT ANY 5)	
In questi	on25, 26, 27, 28, 29 given below, there are two statements marked as Assertion (A) and Rea	ason
( <b>R</b> ). Mar	k your answer as per the codes provided below:	
1. Bo	oth A and R are true and R is the correct explanation of A.	
2. Bo	oth A and R are true but R is not the correct explanation of A.	
3. A	is true but R is false.	
4. A	is false but R is true.	
		A -
25. A:	Rajasthani painting was burnished with an agate.	0.6
R: A	Agate was used to lend a uniform sheen for appealing resplendence.	
26. A:	Rajasthani painting was painted on 'washis'.	0.6

R: 'Washis' was used to get the desired thickness.

27.	A: "Krishna on swing " painting was painted by Nuruddin.						
	R: Sub school of "Krishna on swing" painting is Bikaner.						
28.	A: Mughal style was responsible for the amalgamation of indigenous themes.						
	R: The a	art of this period reflect a synthesis of foreig	n influend	ces.			
29.	A: Haji	Madani, belongs to Shah Jahan period.			0.6		
	R: Haji	Madani built TajMahal in Agra.					
30.	. MATCH THE COLUMN A WITH THE SUITABLE OPTION OF COLUMN B						
	COLUN	MN A	COLUMN B				
	1	Pichwayi means	Α	Left Hand			
	2	Miskin	B	The legends of the period Quil Intab S	hah		
	3	Bani Thani holding lotus	C	Back curtain			
	4	Anwar-i-Suhali and Yusuf-Zulekha	D	Krishna lifting Mount Govardhana			
	A. 1-B/2-A/3-D/4-C						
	B. 1-D/2-A/3-C/4-B						
	C. 1-C/2-D/3-A/4-B						
	D. 1-A/	2-C/3-D/4-B					

# SAMPLE QUESTION PAPER (2021-22) <u>Class – XII</u> <u>TERM – 1</u> <u>ENGINEERING GRAPHICS (046)</u>

# Maximum Marks: 35

**General Instructions:** 

- 1. The Question Paper contains three sections A, B and C.
- 2. Section A has 25 questions. Attempt any 20 questions.
- 3. Section B has 24 questions. Attempt any 20 questions.
- 4. Section C has 6 questions. Attempt any 5 questions.
- 5. All questions carry equal marks.
- 6. There is no negative marking.

# SECTION A

### This Section A has 25 Multiple Choice Questions. Attempt any 20 questions.

- 1) Which is the included angle of a regular hexagon?
  - a) 30<sup>0</sup>
  - b) 60<sup>0</sup>
  - c) 90<sup>0</sup>
  - , d) 120<sup>0</sup>
- 2) Name the projection with multiple views.
  - a) Perspective projection
  - b) Isometric projection
  - c) Orthographic projection
  - d) Oblique projection
- 3) Name the solid with apex.
  - a) Cone
  - b) Square prism
  - c) Triangular Prism
  - d) Sphere
- 4) Name the type of line which is used for dimensioning.
  - a) Small dash line
  - b) Chain line
  - c) Wavy line
  - d) Thin continuous line
- 5) Which is the correct sequence in case of first angle method of projection?
  - a) Observer, Plane of projection, Object
  - b) Observer, Object, Plane of projection
  - c) Object, Plane of projection, Observer
  - d) Object, Observer, Plane of projection
- 6) What is the thread angle of a metric thread?
  - a) 40<sup>0</sup>
  - b) 60<sup>0</sup>
  - c) 80<sup>0</sup>
  - d) 100<sup>0</sup>
- 7) The angle between the flanks of a BSW thread profile is?

# Time Allowed: 90 Minutes

- a) 60<sup>0</sup>
- b) 90<sup>0</sup>
- c) 55<sup>0</sup>
- d) 45<sup>0</sup>
- 8) Usually the section lines are inclined with horizontal line at.
  - a) 45<sup>0</sup>
  - b) 35<sup>0</sup>
  - c) 25<sup>0</sup>
  - d) 15<sup>0</sup>
- 9) Which one of these is a temporary fastening?
  - a) Welding
  - b) Nut-Bolt
  - c) Riveting
  - d) Pasting
- 10) Which among these is used for power transmission?
  - a) Square thread
  - b) BSW thread
  - c) Metric thread internal
  - d) Metric thread external

# FILL IN THE BLANKS

12)

- 11) \_\_\_\_\_\_ is the projection used in engineering practices.
  - a) Isometric projection
  - b) Oblique projection
  - c) Perspective projection
  - d) Inclined projection
    - \_\_\_projection gives the true size of the object.
    - a) Isometric
    - b) orthographic
    - c) Oblique
    - d) Perspective
- 13) The isometric length of 70 mm is \_\_\_\_\_\_.
  - a) Equal to true 70 mm
  - b) Less than true 70 mm
  - c) More than true 70 mm
  - d) Equal to true 100 mm.

# 14) The angle between the main scale and isometric scale is \_\_\_\_\_

- a) 15<sup>0</sup>
- b) 30<sup>0</sup>
- c) 45<sup>0</sup>
- d) 90<sup>0</sup>

15) The shape of circle in isometric projection is \_\_\_\_\_\_.

- a) Cycloid
- b) Circle
- c) Parabola
- d) Ellipse

16) The angle of chamfer is usually \_\_\_\_\_ with the base of a hexagonal nut.

- a) 10<sup>0</sup>
- b) 20<sup>0</sup>
- c) 30<sup>0</sup>
- d) 40<sup>0</sup>
- 17) The full form of B. S. W. thread is \_\_\_\_\_\_.
  - a) Bureau of Standard Width
  - b) Bureau of Standard Whitworth
  - c) British Standard Width
  - d) British Standard Whitworth
- 18) Knuckle thread is a modified form of a \_\_\_\_\_\_ screw thread.
  - a) Square
  - b) BSW
  - c) Metric
  - d) V-thread

# **CHOOSE THE MOST APPROPRIATE FIGURE**

19) A vertical square prism with its axis perpendicular to HP and parallel to VP



20) A horizontal solid



# 21) A hemisphere resting on HP with its circular face on it



# 22) An inverted solid





# 23) A solid resting on one of its long edges







(d)





# 25) Isometric projection of a horizontal square


# **SECTION B**

## This Section B has 24 Multiple Choice Questions. Attempt any 20 questions.



- a) The base edge of a cube is not equal to its height.
- b) The base edge of a cube is equal to its height.
- c) A cube has eight faces.
- d) A cube has an apex.



- a) Axis of the prism is perpendicular to H.P.
- b) Axis of the prism is parallel to V.P.
- c) Hexagonal ends of the prism are perpendicular to V.P.
- d) Hexagonal ends of the prism are parallel to V.P.



- a) The cylinder is resting on H.P. with one of its long edges on it.
- b) The cylinder is resting on H.P. with its base on it.
- c) The cylinder is resting on H.P. with one of its rectangular faces on it.
- d) The cylinder is resting on H.P. with its axis parallel to both H.P. and V.P.





- a) The axis is inclined to H.P.
- b) The axis is inclined to V.P.
- c) The axis is perpendicular to H.P. and parallel to V.P.
- d) The axis is perpendicular to V.P. and parallel to H.P.



- a) One of the base sides of the pentagonal pyramid is perpendicular to V.P.
- b) One of the base sides of the pentagonal pyramid is parallel to V.P.
- c) One of the base sides of the pentagonal prism is perpendicular to V.P.
- d) One of the base sides of the pentagonal prism is parallel to V.P.



- a) The common axis is perpendicular to HP and parallel to VP
- b) The common axis is perpendicular to VP and parallel to HP
- c) The axis of the prism is parallel to HP and the axis of the pyramid is perpendicular to HP
- d) The axis of the prism is perpendicular to HP and the axis of the pyramid is parallel to HP



- a) The top solid is square prism and the bottom solid is triangular prism.
- b) The top solid is triangular prism and the bottom solid is square prism.
- c) Both the solids are square prisms.
- d) Both the solids are triangular prisms.



- a) The size of common axis is true 90mm.
- b) The size of common axis is less than true 90mm.
- c) The size of common axis is more than true 90mm.
- d) The size of common axis is true 100mm.

# SELECT THE CORRECT OPTION CORRESPONDING TO THE ORIENTATION OF THE GIVEN ISOMETRIC PROJECTION OF COMBINATION OF SOLIDS.



- a) Both the solids are vertical and one of the base edges of the prism is parallel to VP and nearer the observer.
- b) Both the solids are vertical and one of the base edges of the prism is perpendicular to VP.
- c) Both the solids are vertical and one of the base edges of the prism is parallel to VP and near it.
- d) Both the solids are vertical and two of the base edges of the prism are parallel to VP.



- a) The common axis is perpendicular to HP and two of the base edges of the prism are perpendicular to VP
- b) The common axis is perpendicular to VP and two of the base edges of the prism are perpendicular to VP
- c) The common axis is perpendicular to HP and two of the base edges of the prism are parallel to VP
- d) The common axis is perpendicular to VP and two of the base edges of the prism are parallel to VP



- a) A hemisphere is kept centrally on the top hexagonal surface of a hexagonal prism with its curved surface on it.
- b) A sphere is kept centrally on the top hexagonal surface of a hexagonal prism with its curved surface on it.
- c) A hemisphere is kept centrally on the top rectangular face of a hexagonal prism with its curved surface on it.
- d) A sphere is kept centrally on the top rectangular face of a hexagonal prism with its curved surface on it.



- a) A vertical square pyramid is kept on a vertical circular disc.
- b) A vertical triangular pyramid is kept on a vertical square slab.
- c) A vertical square pyramid is kept on a vertical square slab.
- d) A vertical triangular pyramid is kept on a vertical circular disc.



- a) The isometric projection of a sphere is a circle whose diameter is equal to the isometric diameter of the sphere.
- b) The isometric projection of a sphere is a circle whose diameter is equal to the true diameter of the sphere.
- c) The isometric projection of a sphere is a circle whose diameter is equal to half of the true diameter of the sphere.
- d) The isometric projection of a sphere is a circle whose diameter is equal to double of the true diameter of the sphere.



- a) Axis of both prism and cylinder are perpendicular to HP.
- b) Axis of both prism and cylinder are perpendicular to VP.
- c) Axis of prism is perpendicular to VP and axis of cylinder is perpendicular to HP.
- d) Axis of prism is perpendicular to HP and axis of cylinder is perpendicular to VP.



- a) A vertical cylinder of base diameter 40 mm is placed centrally on a hexagonal prism which is resting on HP with one of its long edges on it.
- b) A vertical cylinder of base diameter 40 mm is placed centrally on a pentagonal prism which is resting on HP with one of its long edges on it.
- c) A vertical cylinder of base diameter 40 mm is placed centrally on a pentagonal prism which is resting on HP with one of its rectangular faces on it.
- d) A vertical cylinder of base diameter 40 mm is placed centrally on a hexagonal prism which is resting on HP with one of its rectangular faces on it.



- a) A vertical pentagonal pyramid with one of its base edges parallel to VP is placed centrally on a horizontal square prism with its square ends parallel to VP.
- b) A vertical pentagonal pyramid with one of its base edges perpendicular to VP is placed centrally on a horizontal square prism with its square ends perpendicular to VP.
- c) A vertical hexagonal pyramid with two of its base edges perpendicular to VP is placed centrally on a horizontal square prism with its square ends parallel to VP.
- d) A vertical hexagonal pyramid with two of its base edges parallel to VP is placed centrally on a horizontal square prism with its square ends perpendicular to VP.

# TWO STATEMENTS ARE GIVEN – ONE LABELLED ASSERTION (A) AND THE OTHER LABELLED REASON (R). SELECT THE CORRECT ANSWER TO THE FOLLOWING QUESTIONS FROM THE CODES (a), (b), (c) AND (d) AS GIVEN BELOW:

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true and R is not the correct explanation of A.
- c) A is true but R is false.
- d) A is false and R is also false.

- 42) A: Knuckle thread is a modification of a square thread.
  - R: Knuckle threads are used in electric bulbs.
- 43) A: The portion between the crest and root is called flank.
  - R: The angle between the flanks in a metric thread is 90<sup>0</sup>.
- A: The actual depth of square thread is given as 0.96P, where P represents the pitch of thread.R: The portion between crest and root is called as pitch.
- 45) A: Left hand thread is represented by LH thread.

R: Usually all the jewellery mating pieces have LH threads.

- 46) A: Chamfering on a nut is the process of removing sharp corners by rounding off the corners.R: Chamfering is done on a nut to ensure the safety of the user.
- 47) A: A plain washer is a circular plate having a hole in its centre.

R: If the nominal diameter of the bolt on which the washer is used is D, then the inner diameter of the washer is given as 2D+6.

48) A: The angle of chamfer is  $60^0$  with the base of a nut.

R: A hexagonal headed bolt cannot be used with a hexagonal nut.

49) A: Triple start threads are more useful when a quick advance is required in a screwed pair, than single start threads.

R: If L represents Lead and P the pitch of the screw threads,

- L = P in the case of single start thread.
- L = 3P in the case of triple start threads.

# **SECTION C**

# This Section C has 6 Multiple Choice Questions. Attempt any 5 questions.

# **ANSWER THE FOLLOWING QUESTIONS AFTER READING THE GIVEN PASSAGE:**

Amit buys a football as a gift for his brother. The radius of the football is 15 cm. He packs it in a square box (cube) which is just fit enough. His brother is very happy. He is a footballer and he also loves to sketch. He sketches a 3-D model of this football placed on the apex of a triangular pyramid, making it look like a trophy. He might 3-D Print his model as an inspiration. He is aspiring to win the Inter-School Football Championship this year.



- 50) What will be the minimum dimension of side of the gift-box (cube)?
  - a) 15 cm
  - b) 30 cm
  - c) 45 cm
  - d) 60 cm
- 51) If he has used isometric projection method to obtain the 3 D model, then the size of the football drawn will be
  - a) double
  - b) foreshortened
  - c) same
  - d) halved
- 52) The isometric projection of the equilateral triangular base of his model will be
  - a) an equilateral triangle
  - b) an isosceles triangle
  - c) a scalene triangle
  - d) a right angled triangle
- 53) What is the orientation of the common axis of these two solids?
  - a) Axis parallel to HP and VP
  - b) Axis perpendicular to HP
  - c) Axis perpendicular to VP
  - d) None of the above

- 54) In case he uses a triangular prism instead of the pyramid, what will be the height of his trophy?
  - a) It remains same
  - b) It becomes double
  - c) It becomes half
  - d) It becomes triple
- 55) He used \_\_\_\_\_\_ in his isometric projection method.
  - a) True scale
  - b) Vernier scale
  - c) Diagonal scale
  - d) Isometric scale

#### **DELHI PUBLIC SCHOOL, RANCHI**

SESSION – 2021-22 Practice Worksheet IV Class XII Economics Maximum Marks : 40 Time- 90 Minutes

#### **General Instructions**

- 1. All questions are compulsory.
- 2. There are 40 questions in all.
- 3. This question paper contains MCQs, Case Based MCQs and Assertion-Reason based MCQs.
- 4. Only one of the options in every question is correct.

#### Section A: MacroEconomics

- 1. Which of the following is not a function of the central bank in India?
  - (a) Controller of money supply in the economy
  - (b) Creator of money supply in the economy
  - (c) Banker to the government and banks
  - (d) Custodian of foreign exchange reserves
- 2. Components of money supply in India include \_\_\_\_\_ and \_\_\_\_
  - (a) Currency with public and time deposits with post offices
  - (b) Currency with public and time deposits with commercial banks
  - (c) Currency with public and demand deposits with post offices
  - (d) Currency with public and demand deposits with commercial banks
- 3. Government budget is an annual and estimated statement of:
  - (a) Receipts during a fiscal year
  - (b) Expenditure during a fiscal year
  - (c) Profits during a fiscal year
  - (d) Both (a) and (b)

4. In a government budget, the estimated receipts exceed estimated expenditure during a fiscal year, this situation can be used to deal with which of the following?

- (a) Inflation
- (b) Deflation
- (c) Both (a) and (b)
- (d) Neither (a) nor (b)

5. In India, progressive tax system is followed which imposes more burden on higher income groups as compared to the lower income group. This is in line with \_\_\_\_\_\_ objective of the government budget.

- (a) Reallocation of resources
- (b) Economic growth
- (c) Fiscal discipline
- (d) Bringing equality in the distribution of income

6. \_\_\_\_\_ deficit is the difference between borrowing and interest payments.

- (a) Revenue
- (b) Fiscal
- (c) Primary
- (d) Both (a) and (b)

7. Evolution of money has led to expansion of the market by separating the acts of buying and selling. Choose the most appropriate option from below:

- (a) True
- (b) False
- (c) Partially true
- (d) Incomplete sentence

8. The ability of commercial banks to create currency is directly related to legal reserve ratio.Choose the most appropriate option from below:

- (a) True
- (b) False
- (c) Partially true
- (d) Incomplete sentence

9. Unfavourable balance of trade leads to outflow of foreign exchange from domestic country. Choose the most appropriate option from below:

- (e) True
- (f) False
- (g) Partially true
- (h) Incomplete sentence

10. Choose the correct pair:

Column I	Column II
A.Currency Authority	i.Commercial Banks
B.Creator of	ii.Central Bank

Currency	
C.Currency Notes	iii.Limited Legal Tender
D.Currency Coins	iv.Minted by Central Government

11. Match the following pairs:

Column I	Column II
A.Surplus Budget	i.Shortage of receipts over expenditure
B.Balanced Budget	ii.Equality of receipts and expenditure
C.Deficit Budget	iii.Excess of receipts and expenditure
D.Revenue Deficit	iv.Excess of revenue expenditure over receipts

Choose the correct option:

- (a) A-i, B-iii, C-iv, D-ii
- (b) A-iii, B-ii, C-i, D-iv
- (c) A-ii, B-ii, C-iii, D-iv
- (d) A-iv, B-ii, C-i, D-iii

## For Questions 12 and 13, two statements, Assertion ( A ) and Reason ( R ) are given. Choose one of the correct alternatives given below:

- (a) Both Assertion(A) and Reason(R) are true and R is the correct explanation of A.
- (b) Both Assertion(A) and Reason(R) are correct but R is not the correct explanation of A.
- (c) Assertion(A) is wrong but Reason(R) is correct.
- (d) Both are false
- 12. Assertion (A): Central Bank as a banker to the government functions as a financial advisor.

**Reason ( R ):** All levels of government can keep banking relations with the Central Bank of the country.

13. **Assertion (A):** Fiscal Deficit is always equal to the borrowings of previous fiscal year. **Reason ( R ):** Deficit in revenue is covered by borrowings or disinvestment.

# Read the following passage and answer questions 14-18:

In the wake of Mexican and Asian currency turmoil, the subject of financial crisis has come to the forefront of academic and policy discussions. It has been found that the problems in the banking sector typically precede a currency crisis, i.e. the currency crisis deepens the banking crisis, activating a vicious spiral; financial liberalisation often preceds banking crisis. The anatomy of these episodes suggests that crisis occurs as the economy enters a recession, following a prolonged boom in the economic activity that was fuelled by credit, capital inflows and accompanied by an overvalued currency.

Whatever the cause of currency crisis, neither the old literature nor the new models of self-fulfilling crisis have paid much attention to the interrelation between banking and currency problems, despite the fact that many of the countries that have had currency crisis have also had full fledged domestic banking crisis around the same time.

- 14. How will the banking crisis in domestic country affect demand curve for foreign exchange?
  - (a) Demand Curve for foreign exchange will shift to the right
  - (b) Demand Curve for foreign exchange will shift to the left
  - (c) There will be a downward movement along the demand curve
  - (d) There will be an upward movement along the demand curve

15. Increase in demand for foreign exchange will lead to \_\_\_\_\_ in foreign exchange rate.

- (a) Rise
- (b) Fall
- (c) No change
- (d) None of these

16. During the currency crisis, the foreign exchange reserve with central bank will

- (a) Increase
- (b) Decrease
- (c) Remain constant
- (d) None of these

17. Which of the following steps should be taken by the Central Bank in order to control the external price of currency?

- (a) Demand more foreign exchange
- (b) Supply foreign exchange from its reserves
- (c) Do not intervene in the foreign exchange market
- (d) Both (a) and (b)

18. **Assertion (A):** Foreign exchange crisis leads to improvement in the balance of trade of the country

Reason (R): Fall in exchange rate is accompanied with rise in demand for domestic goods.

- (a) Both Assertion(A) and Reason(R) are true and R is the correct explanation of A.
- (b) Both Assertion(A) and Reason(R) are correct but R is not the correct explanation of A.
- (c) Assertion(A) is wrong but Reason(R) is correct.
- (d) Both are false

## Section B: Indian Economy

19. Which of the following years is known as the Year of the Great Divide?

- (a) 1850
- (b) 1853
- (c) 1921
- (d) 1991

20. During the initial phase of industrialisation, the public sector was given a leading role due to which of the following reasons?

- (a) Lack of capital with private sector
- (b) Equitable distribution of goods in the economy
- (c) Welfare motive of the public sector
- (d) All of these
- 21. Huge expenses were incurred by the British Government to:
  - (a) Develop the Indian Economy
  - (b) Manage their colonial rule in India
  - (c) Fight wars
  - (d) Both (b) and (c)
- 22. Jail Cost of Living was given by:
  - (a) Dadabhai Naoroji
  - (b) VKRV Rao
  - (c) P.C. Mahalanobis
  - (d) S.D. Tendulkar
- 23. Schedule B IPR, 1956 comprises of how many industries?
  - (a) 16
  - (b) 12
  - (c) 10
  - (d) 8

24. \_\_\_\_\_ refers to the economic help given by the government to the farmers to reduce the income gaps of rich and poor farmers.

- (a) Loans
- (b) Subsidies
- (c) Concessions
- (d) All of these

25. The two-fold motive of the colonial government led to systematic deindustrialisation of Indian Handicraft Industries.

Choose the correct alternative:

The given statement is \_\_\_\_\_.

- (a) True
- (b) False
- (c) Partially true
- (d) Incomplete statement

26. Choose the incorrect pair from the given match:

Column I	Column II
A.Schedule A of IPR 1956	i.17 public sector undertakings
B.Land Ceiling	ii.Fixing maximum limit on holdings of land by an individual
C.Golden Revolution	iii.Wheat Revolution
D.Disinvestment	iv.Selling a part of equity holdings of PSUs

- (a) A-i
- (b) B-ii
- (c) C-iii
- (d) D-iv

27. Choose the correct pair from the given below match:

Column I	Column II
A.MGNREGA	i.Self employment poverty alleviation programme

B.Investment on Information	ii.Component of human capital
C.Agricultural Marketing	iii.Guarantee of minimum prices to farmers
D.Horticulture	iv.Highest contribution to non farm activities

Choose from the options below:

- (a) A-i
- (b) B-ii
- (c) C-iii
- (d) D-iv

# For Questions 28- 30, two statements, Assertion (A) and Reason (R) are given. Choose one of the correct alternatives given below:

- (a) Both Assertion(A) and Reason(R) are true and R is the correct explanation of A.
- (b) Both Assertion(A) and Reason(R) are correct but R is not the correct explanation of A.
- (c) Assertion(A) is wrong but Reason(R) is correct.
- (d) Both are false

28. Assertion (A): Globalisation is an outcome of liberalisation and privatisation policies.

Reason (R): New Economic Policies were imposed upon India by IMF

29. **Assertion (A):** Credit plays a very important role in farmers living due to irregular income sources.

Reason (R): Farmers borrow from a variety of sources for a variety of purposes.

30. Assertion (A): Economic Growth and Human Capital Formation are directly proportional. Reason (R): Economic Growth leads to increase in availability of resources for all in the economy.

## Read the following case study and answer the questions 31-35:

In a market economy, also called capitalism, only those consumer goods will be produced that are in demand, i.e. goods that can be sold profitably either in the domestic or in the foreign markets. If cars are in demand, cars will be produced and if bicycles are in demand, bicycles will be produced. If labour is cheaper than capital, more labour-intensive methods of production will be used and vice versa. In a socialist society, the government decides how goods are to be produced in accordance with the needs of society. The government decides how goods are to be produced and how they should be distributed. In principle, distribution under socialism is supposed to be what people need and not on what they can afford to purchase. In Cuba and China, for example, most of the economic activities are governed by the socialist principles. In a mixed economy, the market will provide whatever goods and services it can produce well and the government will provide essential goods and services which the market fails to do.

31. India opted for mixed economic structure due to which of the following reasons?

- (a) Lack of capital with private sector
- (b) Government was not able to take all its decisions on its own
- (c) Private Sector is motivated by profit maximisation only
- (d) All of the above

## 32. In a market economy, central problem is dealt by:

- (a) Market forces of demand and supply
- (b) Planning by capitalist
- (c) Invisible Hand
- (d) Both (a) and (c)

33. \_\_\_\_\_ type of economy is considered to maximise welfare of all sections of the society.

- (a) Mixed
- (b) Capitalist
- (c) Socialist
- (d) All of these

34. **Assertion (A):** Capitalist economies are considered as the most efficient system of economic structures.

Reason (R): Profit motive is the guiding principle of market based economies

Alternatives:

- (a) Both Assertion(A) and Reason(R) are true and R is the correct explanation of A.
- (b) Both Assertion(A) and Reason(R) are correct but R is not the correct explanation of A.
- (c) Assertion(A) is wrong but Reason(R) is correct.
- (d) Both are false

35. Laissez Faire policy is a feature of which of the following economic structures?

- (a) Mixed
- (b) Capitalist
- (c) Socialist
- (d) Both (a) and (b)

#### Read the following case study and answer the questions 36-40:

Human resource means people and manpower. Human resources in simple terms, explain inherent skills, talents and creative abilities. Human fund is an active agent which accumulates capital and exploits natural resources in order to build economic, political and social institutions. But all human resources are not human capital. People need competencies (knowledge). Knowledge, attitudes, values and skills are treated as human capital. So, higher degree and quality of work takes place through the process of performance, education, feedback, training, preview of performance, job rotation and rewards. Human Resource Development means to improve the abilities and attitudes of an individual to make better personal growth. In human resource development, education inculcates rational attitudes towards life and work which raises labour utilisation and productivity. So, proper planning for education is necessary for human resource development in a particular society. Human capital formation means investing in education, health and training programmes of the present and future manpower.

36. Choose the correct statement from the given below:

- (a) Economic growth without human development is not sustainable.
- (b) Human capital formation is a lifelong process.
- (c) Human capital appreciates with time.
- (d) All of the above are correct.

37. **Assertion (A):** In human development, education inculcates rational attitudes towards life and work, which raises labour utilisation and productivity.

**Reason ( R ):** Education without health makes the process of human capital formation weak in the long run.

Alternatives:

- (a) Both Assertion(A) and Reason(R) are true and R is the correct explanation of A.
- (b) Both Assertion(A) and Reason(R) are correct but R is not the correct explanation of A.
- (c) Assertion(A) is wrong but Reason(R) is correct.
- (d) Both are false
- 38. Human Resources refer to \_\_\_\_\_.
  - (a) People
  - (b) Manpower
  - (c) Skilled manpower
  - (d) Both (a) and (b)

39. Training is an important component of human capital formation due to which of the following reasons?

- (a) It encourages inventions.
- (b) It improves efficiency and motivation.
- (c) It helps keeping pace with hanging production techniques
- (d) All of the above
- 40. Lack of proper manpower planning leads to:
  - (a) Wastage of human resources.
  - (b) Fall in economic growth.
  - (c) Lower economic development.
  - (d) All of the above.

Sample paper 4 Subject History

#### GENERAL INSTRUCTIONS

- 1. The paper has been divided into four sections-A,B,C and D.
- 2. Section A contains 24 questions. Attempt any 20 questions.
- 3. Section B contains 22 questions. Attempt any 18 questions.
- 4. Section C contains two Case based questions with 12 questions. Attempt any 10 questions.
- 5. Section D contains questions 59 and 60 which are Map Based questions. Both the questions have to be attempted.
- 6. All questions carry equal marks.
- 7. There will be no negative marking.

## SECTION - A

- 1. Which of these sites of Harappan Civilisation belong to Haryana?
- A. Kalibangan
- B. Lothal
- C. Banawali
- D. Shortugai
- 2. The Indus Valley people had trade relations with:
- A. Egypt B. Greece C. Ceylon D. Mesopotamia

3. Which one of the following archaeologists initially discovered seals similar to those found in Harappa?

A. Sir John Marshall B. Rakhal Das Banerji C. Daya Ram Sahni D. R.E.M. Wheeleer

4. Asokan inscriptions were first deciphered by:

A. James Prinsep B. Buhler C. Robert Sewell D. Codrington

5. Who among the following was the composer of 'Prayaga Prashasti'?

- A. Kalidasa B. Kalhana C. Harishena D. Banabhatta
- 6. The Indus Valley houses were made of :
- A. Bamboo B. Burnt bricks C. Wood D. Stone
- 7. The task of preparing a critical edition of the Mahabharata was entrusted to:
- A. V.S.Sukthankar B. R.K. Bannerji C. S.N.Roy D. John Marshall
- 8. The Sudarshana lake was rebuilt by :
- A. Rudradaman B. Kanishka C. Harsha D. Ashoka
- 9. Which of the following dynasties did not rule Vijayanagara?
- A. Sangama B. Saluva C. Tuluva D. Yadava
- 10. Which of the following books was written by Krishnadeva Raya? A.

Arthashastra B. Amuktamalyada C. Kitab-ul-Hind D. Humayun Nama

- 11. Which of the following is not a constituent of the stupa?
- A. Pitha B. Anda C. Harmika D. Chhatri
- 12. Jaggannatha is a form of :
- A. Shiva B. Vishnu C. Brahma D. Rudra
- 13. Who among the following Gurus of Sikhs compiled Shree Guru Adi Granth Sahib?
- A. Guru Teg Bahadur B. Guru Arjan Dev C. Guru Nanak Dev D. Guru Gobind Singh
- 14. The dargah of Shaikh Salim Chishti was constructed in:
- A. Fatehpur Sikri B. Nankana Sahib C. Merta D. Gwalior
- 15. In which language did Buddha preach?
- A. Pali B. Prakrit C. Brahmi D. Sanskrit
- 16. Which of the following places has not yielded the remains of a stupa?

A. Sanchi B. Sarnath C. Amaravati D. Pataliputra

17. Which of the following towns was near the coast?

A. Mathura B. Pataliputra C. Ujjayini D. Puhar

18. Sangam literature was written in:

A. Tamil B. Kannada C. Telugu D. Malayalam

19. Which of the following archaeologists excavated at Hastinapura?

A. B.B. Lal B. S.N. Roy C. John Marshall D. R.E.M. Wheller

20. Which of the following information is not got from the Mahabharata?

A. Society was patriarchal in nature B. It gives us an insight into the working of the caste system C. Wives were treated as the property of their husbands D. Rules of warfare

21. Which one of the following battles weakened Vijayanagar kingdom?

A. Battle of Talikotta B. Battle of Panipat C. Battle of Mysore D. Battle of Travancore

22. The principle that distinguishes Jainism from Buddhism is the:

A. Practice of the eightfold Path B. Rejection of infallibility of Vedas C. Attribution of a soul to all beings and things D. Belief in rebirth

23. Which Mughal Emperor went to Khawaja Muinuddin's durbar 14 times?

A. Babur B. Humayun C. Akbar D. Shah Jahan

24. Which of the following languages were spoken by Rayas and Nayakas in the Vijaynagar Empire?

A. Malayalam and Telugu B. Kannada and Telugu C. Tamil and Telugu D. Sanskrit and Telugu

25. Which of the following statements regarding Jainism is not true?

A. Jainism believed in the equality of all human beings B. Everything had a soul C. It believed in the concept of karma D. Salvation can be achieved through following the middle path

26. Read the following information and identify the practitioners of a sub-discipline of archaeology.

They are the specialists in ancient plant remains. They have been able to reconstruct dietary practices from finds of charred grains and seeds.

- A. Archaeo- Botanist
- B. Archaeo-Zoologist
- C. Geo- Archaeologists
- D. Anthropologists

27. What do you mean by Purusha Sukta?.

A. Purusha Sukta is a hymn in the Rig-Veda citied by Brahmanas to justify their claim B. To supervise court writers and documents C. To form diplomatic relations with neighbouring kings D. It provides extremely rich and interesting details about the social and cultural life

28. Identify the character of Mahabharata with the help of the following information

Mother of Kauravas

Sister of Shakuni

A. Madri B. Kunti C. Uruvi D. Gandhari

29. Which of the following pairs associated with Buddha's symbolic representation is incorrect?

A. Empty seat – Meditation of Buddha B. Wheel- Sermon of Buddha C. Bodhi Tree-Birth of Buddha D. Stupa- Mahaparinibbana.

30. Two statements are given in the question below as Assertion (A) and Reasoning (R). Read the statements and choose the appropriate option.

Assertion (A): From c. 500 BCE norms were compiled in Sanskrit texts known as the Dharmasutras and Dharmashastras.

Reason (R): Brahmanas laid the codes of social behaviour for the society in general.

**Options:** 

A. Both A and R are true, and R is the correct explanation of A.

B. Both A and R are true, but R is not the correct explanation of A.

C. A is true but R is false.

- D. A is false but R is true.
- 31. The book Harshacharita was written by
- A. Banabhatta B. Harshavardhana C. Rudradaman D. Senguttuvan
- 32. Define Hagiography.
- A. It is a biography of a national leader
- B. It is a biography of a saint or religious leader
- C. It is a autobiography of Harsha
- D. It is a autobiography of Kanishka

33. Identify the person with the help of the following information.

The most famous rular of Vijayanagara

Wrote Amuktamalyada

A. Bukka B. Harihara C. Krishnadeva Raya D. Rama Raya

- 34. The didactic (informative) sections of Mahabharata added in 200 BCE and 400 CE largely resemble an ancient text. Which is it?
- A. Sutta Pitaka
- B. Manusmriti
- C. Dharmashastras
- D. Upanishad
- 35. Match the following Archeologist Role /Contributions
- (a) Alexander Cunningham
- (b) Daya Ram Sahni
- (c) John Marshall
- (d) R E M Wheeler
  - civilization Options:

- (i) Discovered seals at Harappa
- (ii) First Director General of ASI
  - (iii) Brought a military precision in archaeology
  - (iv) Announced the discovery of a new
- (d) (a) (b) (c) (ii) (i) (iv) (iii) А В (iv) (iii) (ii) (i) С (iii) (i) (ii) (iv)

D (i) (iii) (iv)

- 36. Find out from the following pairs which one is correctly matched.
- A. Colin Mackenzie --- Vijayanagara
- B. Pampadevi ---- Bhakti traditions
- C. Krishnadeva Raya --- Sangam dynasty
- D. Mahanavami Dibba --- Noted for agriculture technology

37. Who among the following was the sixteenth-century Portuguese traveller in Vijayanagara?

- A. Nicolo de Conti
- B. Ibn Battuta
- C. Domingo Paes
- D. Abdur Razzaq

38. The twelfth century witnessed the emergence of a new movement as Virashaiva tradition. This continues to be an important community in the region to date. Our understanding of this tradition is derived from vachanas composed by women and men who joined the movement.

Which of the following statement is correct about this tradition? A.

It emerged in Kerala.

- B. It was led by a Basavanna .
- C. Their followers were known Nayanars.
- D. They supported the idea of caste and theory of rebirth.
- 39. Read the following statements:
- I. Krishnadeva Raya's rule was characterised by expansion and consolidation.
- II. There was peace and prosperity in his empire.
- III. He was credited with building some fine temples.
- IV. He was defeated in the Battle of Rakshi Tangadi.

Which of the above statements are related to Krishnadeva Raya?

A. Only I

- B. I, II and III
- C. II, III and IV D. I, III and IV
- 40. Which of the following statements regarding the power the amara –nayakas is not true?

A. They were given territory in lieu of salary. B. They were given a free hand in the collection of land revenue. C. They sent a bi-annual tribute to the king. D. To prevent them from becoming powerful, the kings occasionally transferred them from one place to another.

41. The Padmavat was composed by\_\_\_\_\_

- A. Baba Farid
- B. Malik Muhammad Jayasi
- C. Kabir

D. Guru Nanak

42. Read the following statements regarding Sufism in India:

I. They turned to asceticism and mysticism in protest against the growing materialism II.

They sought an interpretation of Quran on the basis of their experience.

III. Amir Khusroe was the disciple of Shaikh Nizamuddin Aulia.

IV. Sheikh Muinuddin Sijzi was from Delhi.

Which of the following statements are correct?

A. I,II, and III

B. III, IV and I

C. I,III and IV

D. II and IV

43. Read the following information given in the box carefully:

• She was a Rajput princess from Merta in Marwar.

• She considered Lord Krishna as her lover.

Identify the name of the devotee of Saguna Bhakti from the following options

A. Andal

B. Gargi

C. Meera Bai

D. Maitreyi

44. Consider the following statements with regard to the Sanchi Stupa :

I. It is the largest Stupa II. The gateways of the Stupa were richly carved. III. Several animal stories are depicted at Sanchi IV. Sanchi Stupa survived while the Amaravati Stupa did not

Select the code for the correct statements.

A. I only

B. III only

C. I,II,III,IV

D. II only

45. Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason( R):

Assertion (A) : The tomb of Khawaja Muinuddin was visited by sultans and regional kings of the region.

Reason (R) : His tomb was located in Ajmer on the trade route linking Delhi and Gujarat.

Options: A. Both A and R are true and R is the correct explanation of A. B. Both A and R are true but R is not the correct explanation of A. C. A is true, but R is false. D. A is false, but R is true.

46. Study this image of an aerial view of the Virupaksha temple carefully and answer any three of the following questions by choosing the correct option.



The rulers of the Vijayanagara gave importance to the construction of temples because

- A. Deity in this temple was explicitly or implicitly identified with the king.
- B. It functioned as centre for learning.
- C. The construction, repair and maintenance of temple were important means of winning support and recognition for their power wealth and piety. D. All of these.

Section-C

Case Based Questions

\_\_\_\_\_

A. Read the following source carefully and answer the following MCQs by choosing the most appropriate option.

The One Lord

Here is a composition attributed to Kabir:

Tell me, brother, how can there be No one lord of the world but two?

Who led you so astray?

God is called by many names: Names like Allah, Ram, Karim, Keshav, Hari, and Hazrat.

Gold may be shaped into rings and bangles.

Isn't it gold all the same?

Distinctions are only words we invent ...

Kabir says they are both mistaken.

Neither can find the only Ram. One kills the goat, the other cows.

They waste their lives in disputation.

47. Identify the connotation of Kabir from the following options.

- A. Monotheistic aspect
- B. Polytheistic Aspect
- C. Atheist Aspect
- D. Theocratic Aspect

48. Kabir used different names for God or the Supreme power. What can one infer from this?

- A. Concept of Ultimate Reality
- B. Faith in Saguna bhakti
- C. Rituals a way to gain insight
- D. Reality is in worshipping idols
- 49. How has Kabir's compositions promote communal harmony at large?
- A. Kabir mentions about one God in all
- B. He questioned religious practices
- C. He was a Hindu by birth D. He was an Islamic by birth
- 50. Which of the following is the part of Kabir's philosophy?

A. He gave emphasis on traditions and rituals

B. He used connotations as Shabda or Shunya .

C. He gave emphasis on Yajnas and sacrifices

D. He was a fundamentalist in his approach

51. Kabir's poetry has a literary as well as a philosophical significance. Select the most appropriate option from the following that describes this essence.

A. God is one who just has different names

B. God is vested in all saguna forms

C. God is a philosophy in isolation from rituals

D. God is based on reincarnation

52. Read the following statements regarding Kabir and select the appropriate option I Kabir was a nirguna saint.

II. He believed in formless supreme God.

III He wanted to remove the differences based on caste and religion .

IV. He condemned the superstitious cults and ritualism.

Options:

A .I & II

B I, II& III

C. I, II,III &IV

D. II,III &IV

B. Read the following source carefully and answer the following MCQs by choosing the most appropriate option.

In praise of Samudragupta

This is an excerpt from the Prayaga Prashasti:

He was without an antagonist on earth; he, by the overflowing of the multitude of (his) many good actions, has wiped off the fame of other kings with the soles of (his) feet; (he is) Purusha (the Supreme Being), being the cause of the prosperity of the good and the destruction of the bad (he is) incomprehensible; (he is) one whose tender heart can be captured only by devotion and humility; (he is) possessed of compassion; (he is) the giver of many hundred-thousans of cows; (his) mind has received ceremonial initiation for the uplift of the miserable, the poor the forlorn and the suffering; (he is) resplendent and embodied kindness to mankind; (he is) equal to (the gods) Kubera (the god of wealth), Varuna (the god of the ocean), Indra (the god of rains) and Yama (the god of death)...

53. In which language was Prayaga Prashasti composed

A. Pali

- B. Prakrit
- C. Sankrit
- D. Tamil
- 54. What is the other name of Prayaga Prashasti?
- A. Allahabad Pillar Inscription
- B. Sarnath Pillar Inscription
- C. Sanchi Inscription
- D. Prayaga Inscription
- 55. Who was the court poet of Samudragupta?
- A. Kalidasa
- B. Balmiki
- C. Banabhatta
- D. Harishena
- 56. Who is the god of wealth?
- A. Varuna B. Agni C. Indra D. Kubera
- 57. Which statement is correct about Purusha?
- A. He is the Supreme Being
- B. He is the cause of prosperity of the good
- C. He brings destruction of the bad
- D. All the these
- 58. When did Samudragupta rule?
- A. Third century CE
- B. Fourth century CE
- C. Fifth century CE
- D. Sixth century CE

# SECTION-D

# MAP BASED QUESTION

On the given outline map of India, identify the Location with the help of specified information:


59. On the political map of India' A' is marked as major Ashokan inscription(Rock Edicts), Identify it among the following options

A. Girnar B. Sopara C. Sannauti D. Shishupalgarh

60. On the same map 'B' is also marked as the Important towns of second century BCE. Identify it from the following options.

A. Mathura B. Bhraghukachchha C. Shravasti D. Puhar

\_\_\_\_

Genera	al Instruction:-	
Attem	ot the questions as per following instructions-	
•	The question paper has three sections as A, B & C	
•	Section A has 24 Objective Type of Questions of 0.80 mark each. Attempt any 20 Questions.	
•	Section B has 24 Objective Type of Questions of 0.80 mark each. Attempt any 20 Questions.	
•	Section C has 12 Objective Type of Questions of 0.80 mark each. Attempt any 10 Questions.	
•	There is only one correct option for every question. Marks will not be awarded for marking more than	n one
	option. There is no negative marking.	
O.NO.	Description of Question	Mark(s
2	SECTION-A (Attempt Any 20 Questions)	
1 W	hich group of Princely States' accession proved more difficult than the rest. 0.80 (A) Junagarh, Hyd	derabad,
	Kashmir & Manipur	
	(B) Junagarh, Bhopal, Travancore, Patiala	
	(C) Kashmir, Hyderabad, Travancore, Bhopal	
	(D) Bhopal, Junagarh, Hyderabad, Mysore	
	0.80	
2.	Who of the following Gandhian economists proposed an alternative blue print that put grea	ter 0.80
	emphasis on rural industrialization?	
	(A) P C Mahalanobis	
	(B) Kakkadan Nandanath Raj	
	(C) J. C. Kumarappa	
	(D) Pitamber Das Sval	
	0.80	
3.	"Broadly, non-alignment means not tying yourself off with military blocsIt means trying	to 0.80
	view things, as far as possible, not from the military point of view, though that has to o	come in
	sometimes, but independently, and trying to maintain friendly relations with all countries". W	ho said?
	(A) V.K. Krishna Menon	
	(B) C. Rajagopalachari (C) Jawahar Lal Nehru	
	(D) Dr. B. R. Ambedkar	
	0.80	
Q.NO.	Description of Question	Mark
1.	The present Secretary General, Antonio Guaterres is from and he is the th	0.80
	Secretary General of the UN.	
	(A) Austria, 8 <sup>th</sup>	
	(B) Norway, 10 <sup>th</sup>	
	(C) Portugal. 9 <sup>th</sup>	
	(D) Peru, 11th	

5	Both sides have the capacity to retaliate against an attack and to cause so much destruction that neither can afford or initiate war. This logic is referred as- (A) Deterrence (B) Defence (C) Alliance Building (D) Confidence Building		
		0.80	
6.	The challenge for most of the non-aligned countries (Least Development Countries) was to be more developed economically and to lift their people out of poverty. Which of the following ideas originated from within this realisation in international politics?(A) SEATO(B) CENTO(C) NIEO(D) NAM	0.80	
		0.80	
7.	<ul> <li>Which among the following statements does not describe the nature of Soviet system?</li> <li>(A) Soviet system did not give primacy to state and the institution of the party.</li> <li>(B) The Soviet system centred around the communist party , and no other opposition .</li> <li>(C) The economy was planned and controlled by state</li> <li>(D) Design a society based on the principle of equality</li> </ul>		
		0.80	
8.	<ul> <li>Which one of the following statements in context to Cuban Missile Crisis was a high point of what came to be known as the Cold War, is INCORRECT?</li> <li>(A) Cuba was an ally of the Soviet Union and received both diplomatic and financial aid from it.</li> <li>(B) In order to convert Cuba into an American base, John F. Kenedy decided to place nuclear missiles in Cuba in the year 1962.</li> <li>(C) In order to get to remove these missiles and nuclear weapons, the American President, John F Kenedy ordered American warships to intercept any Soviet ships heading to Cuba.</li> <li>(D) Fidel Castro was the President of Cuba at that time.</li> </ul>	0.80	
		0.80	
9.	<ul> <li>Which among the following would give more weightage to India's proposal for permanent membership in the Security Council?</li> <li>(A) Nuclear Capability</li> <li>(B) It has been a member of the UN since inception</li> <li>(C) It is located in Asia</li> <li>(D) India's growing economic power and stable political system</li> </ul>	0.80	
		0.80	

Q.NO.	L.NO. Description of Question	

10.	Which pair of leaders signed the Atlantic Charter (August, 1941) ?	0.80
	(A) The US President Franklin D. Roosevelt and British PM Winston Churchill	
	(B) The USSR leader Joseph Stalin and The US President Franklin D. Roosevelt	
	(C) The British PM Winston Churchill & the USSR leader Joseph Stalin	
	(D) The US President Franklin D. Roosevelt and the Chinese leader Maotse Tung	
		0.80
11.	Which of the following statements is FALSE in the context of US decision to drop the bombs on Hiroshima and Nagasaki?	0.80
	(A) US knew that Japan was about to surrender and that it was unnecessary to drop the bombs	
	(B) US action was intended to stop the Soviet Union from making military and political gains in Asia and elsewhere	
	(C) To show Moscow that the United States was supreme	
	(D) US supporters argued that the dropping of the atomic bombs was NOT necessary to end the war quickly.	
		0.80
12.	<ul> <li>The collapse of the second world of the Soviet Union and the socialist systems in eastern</li> <li>Europe had profound consequences for world politics. Which among the followings is NOT an</li> <li>outcome of the same?</li> <li>(A) It brought the end of Cold War confrontation</li> </ul>	0.80
	(B) The power relations in world politics changed	
	(C) The end of Soviet bloc led to the emergence of many new countries	
	(D) The newly independent countries of the Baltic and east European states, did not wanted to join the European Union and NATO	
		0.80
13.	On 11 September 2001 , nineteen hijackers hailing from a number of Arab countries took control of four American commercial aircraft shortly after takeoff and flew them into the important buildings in the US. Which among the following statements is <b>NOT</b> correct in this context?	0.80
	<ul> <li>(A) First airliner crashed into the North Tower of the World Trade Centre in New York.</li> <li>(B) Second airliner crashed into the South Tower of the World Trade Centre in New York.</li> <li>(C) Third aircraft crashed into the Pentagon building in Arlington, Virginia, where the US Foreign</li> </ul>	
	Department is headquartered. (D) The fourth aircraft, presumably bound for the Capitol building of the US Congress, came	

		0.80
Q.NO.	Description of Question	Mark

14.	<ul> <li>4. Recognising the need for cooperation and actually cooperating are two different things. Nations can recognize the need to cooperate but cannot always agree on how best to do soWhich of the following statement is true or false in this regard? <ul> <li>(a) How to share the costs of cooperating?</li> <li>(b) How to make sure that the benefits of cooperating are justly divided?</li> <li>(c) How to ensure that others do not break their end of the bargain and cheat on an agreement?</li> <li>(d) How to honour the terms and conditions of agreement</li> <li>(A)- (a)-True, (b)-True, (c)- True, (d)- True</li> <li>(B)- (a)-True, (b)-True, (c)- True, (d)- True</li> <li>(C)- (a)-True, (b)-True, (c)- False, (d)- True</li> </ul> </li> </ul>	
15.	Which one of the following functions is NOT performed by National Development Council	0.80
	<ul> <li>(NDC)?</li> <li>(A) To prescribe guidelines for the formulation of the National Plan, including the assessment of resources for the plan</li> <li>(B) To make an assessment of the resources required to implement the plan and the way to augment the resources</li> <li>(C) To consider important questions of political and military policy affecting national development.</li> <li>(D) To recommend such measures that are necessary for achieving the aims and targets set out in the National Plan etc.</li> </ul>	
16.	Who is the present Chairperson of NITI Avog?	0.80
	<ul> <li>(A) Narendra Modi</li> <li>(B) Amitabh Kant</li> <li>(C) Rajiv Kumar</li> <li>(D) Nirmala Sitaraman</li> </ul>	0.80
17.	Which of the following organisation is maintaining a State-of-art resource centre? (A)	0.80
	National Development Council	
	(B) Prime Minister's Office (C) Defence Research and Development Organisation	
	(D) National Institution of Transforming India	
		0.80

18.	<ul> <li>What is meant by 'Co-operative Federalism'?</li> <li>(A) Decentralised Planning</li> <li>(B) Recognising that Strong State makes Strong Nation</li> <li>(C) Public Private Partnership infrastructural development</li> <li>(D) Gadhian principles of economic policies</li> </ul>	0.80
		0.80
Q.NO.	Description of Question	Mark

19.	The war with China (1962) alerted the Indian leadership to the volatile situation in the Northeast region? Which group of states represents the same .	0.80
	(A) Assam, Sikkim & Arunachal Pradesh (B) Assam, Manipur & Mizoram	
	(C) Nagaland, Manipur & Tripura (D) Nagaland, Manipur & Mizoram	
Ans.:	(C) Nagaland, Manipur & Tripura	0.80
20.	Which of the following countries is the second largest defence supplier to India after Russia?	0.80
	(A) France (B) USA (C) Israel (D) Germany	
		0.80
21.	<ul> <li>Although it was decided to follow the principle of religious majorities, yet it presented all kinds of difficulties. Which of the following statements is NOT TRUE in this context?</li> <li>(A) There was no single belt of Muslim majority areas in British India. There were two areas of concentration, one in the west and one in the east.</li> <li>(B) Only the Muslim majority areas of North West Frontier Province wanted to be in Pakistan (C) Two of the Muslim majority provinces of British India, Punjab and Bengal, had a very large area where the non-muslims were in majority.</li> <li>(D) The most intractable of the al problem of partition was the problem of 'minorities' on both sides of the border.</li> </ul>	0.80
		0.80
22.	<ul> <li>Write 'True' or 'False' against each of these statements.</li> <li>(i) Non-alignment allowed India to gain assistance both from USA and USSR</li> <li>(ii) India's relationship with her neighbours has been strained from the beginning</li> <li>(iii) The Cold War has affected the relationship[ between India and Pakistan</li> <li>(iv) The Treaty of Peace and Friendship in 1971 was the result of India's closeness to USA Choose the correct one:-</li> <li>(A) - (i)-True,(ii)-True (iii)-True (iv)- False</li> <li>(B) - (i)-True,(ii)-True (iv)- True (iv)- False</li> </ul>	0.80
		0.80
		0.00

23.	Match the principles with instances:		0.80
	(a) Mapping of boundaries on religious ground	(i) Pakistan and Bangladesh	
	(b) Mapping of boundaries on grounds of different languages	(ii) India and Pakistan	
	(c) Demarcating boundaries within a country by geographical zones	(iii) Jharkhand & Chhattisgarh	
	(d) Demarcating the boundaries within a country on administrative and political grounds	(iv) Himachal Pradesh & Uttarakhand	
	Choose the correct one:-		
	(A)- (a)-(i), (b)-(iv), (c) -(ii), (d)-(iii)	(B)- (a)-(ii), (b)-(i), (c) -(iv), (d)-(iii)	
	(C)- (a)-(ii), (b)-(i), (c) -(iii), (d)-(iv)	(D)- (a)-(ii), (b)-(iv), (c) -(i), (d)-(iii)	
			0.80
Q.NO.	Description	of Question	Mark

24.	Fill in the blanks:-		0.80	
	All Chief Ministers and Lieutenant Governors/Adm	inistrators are the members of		
	of NITI Ayog.			
	(A) Drafting Committee	(B) Finance Committee		
	(C) Surveillance Committee	(D) Governing Council		
			0.80	
25.	Arrange the followings in chronological order-		0.80	
	(i) Soviet invasion of Afghanistan			
	(ii) Fall of the Berlin Wall			
	(iii) Disintegration of the Soviet Union			
	(iv) Russian Revolution			
	Choose the correct option:-			
	(A) -(iv)-(i)-(ii)-(iii)	(B)- (iv)-(ii)-(iii)		
	(C)- (ii)-(iii)-(iv)-(ii)	(D)- (iv)-(iii)-(ii)		
			0.80	
26.	Which one of the statements regarding America	a's involvement in South Asia has rapidly	0.80	
	increased after the Cold War is NOT appropriate?			
	(A) The US has had never good relations with both India and Pakistan.			
	(B) Since the end of the Cold War America increasingly works as moderator in India-Pakistan			
	relations			
	(C) Economic reforms and liberal economic polici	(C) Economic reforms and liberal economic policies in both countries have greatly increased		
	the depth of American participation.			
	(D) The large South Asian diasporas in the US and	d the huge size of the population and markets		
	of the region also give America an added stake in th	e future of regional security and peace		

			0.80
27.	<ul> <li>Which among the following statements about the partition is incorrect?</li> <li>(A) Partition of India was the outcome of the "two-nations theory"</li> <li>(B) Punjab and Bengal were the two provinces divided on the basis of religion.</li> <li>(C) East Pakistan and West Pakistan were not contiguous</li> <li>(D) The scheme of Partition included a plan for transfer of populations across the borders.</li> </ul>		
			0.80
28.	Match the following:-		0.80
	Part-A	Part-B	
	a. African year of independence	(i) 1962	
	b. Soviet intervention in Hungary	(ii) 1972	
	c. Nuclear missiles in Cuba	(iii) 1960	
	d. UNCTAD report	(iv) 1956	
	(A)- a-(iii), b-(iv), c-(i) , d-(ii)	(B)- a-(ii), b-(iii), c-(iv) , d-(i)	
	(C)- a-(i), b-(ii), c-(iii) , d-(iv)	(D)- a-(iii), b-(i), c-(ii) , d-(iv)	
			0.80
Q.NO.	Desc	cription of Question	Mark

29.	<b>Assertion:</b> The smaller states in the alliances used the link to the superpowers for their own purposes. They got the promise of protection, weapons, and economic aid against their local rivals.	0.80
	<b>Reason</b> : The alliance systems led by the two superpowers, therefore, threatened to divide the entire world into two camps.	
	(A) Both the Assertion and Reason are correct and the Reason is the correct explanation of the Assertion.	
	(B) Both the Assertion and Reason are correct and but the Reason is not the correct explanation of the Assertion	
	(C) The Assertion is incorrect but the Reason is correct	
	(D) The Assertion is correct but the Reason is incorrect.	
		0.80

30.	<ul> <li>The Soviet system became very bureaucratic and authoritarian, making life very difficult for its citizens. In context to this statement, which one of following statement is NOT true?</li> <li>(A) Lack of democracy and the absence of freedom of speech stifled people who often expressed their dissent in jokes and cartoons.</li> <li>(B) The one-party system represented by the Communist Party of the Soviet Union had tight control over all institutions and was accountable to the people.</li> <li>(C) In the USSR, Russia dominated everything , and people from other regions felt neglected.</li> <li>(D) In the arms race , the Soviet Union managed to match the US on the cost of its stagnation.</li> </ul>					
					0.80	
31.	Fill in the blank:-As a part of its 'Global War on Terror', the US launched against all thosesuspected to be behind the 9/11 attack, mainly Al-Qaeda and the Taliban regime.(A) Operation Desert Storm(B) Operation Iraqi Freedom(C) Operation Infinite Reach(D) Operation Enduring Freedom					
					0.80	
32.	In Central Asia, wh year till 2001. (A) Azerbaijan	i <b>ch one of the followi</b> (B) Tajikistan	ng country witnessed a	a civil war that went on for ten	0.80	
					0.80	
33.	Identify the interna It was established i was to collect eme world. (A) UNDP	ational agency: in 1946 by the United I rgency funds for child (B) UNICEF	Nations General Assem ren and to help in their (C) UNESCO	bly as a body whose main task development work across the (D) ILO	0.80	
Ans.:	(B) UNICEF				0.80	

Q.NO.	Description of Question	Mark

34.		0.80
	Both these cartoon comment on the role of the UN and its Secretary General in this episode.	
	Which one of the following Secretary General was associated with this incident?	
	(A) Boutros Boutros Ghali (Egypt) (B) Ban Ki Moon (South Korea)	
	(C) Kofi Annan (Ghana) (D) Javier Perez de Cuellar (Peru)	
	During June 2006, Israel attacked Lebanon's saying that if was necessary to control the militant group called Heads Large membrant the UNItans were killed and many public buildings and the presidential areas the residential attacks there in any public buildings and the presidential attacks there in any public buildings and the presidential attacks there in any public buildings and the presidential attacks there in any public buildings and the presidential attacks there in any public buildings and the presidential attacks there in any public buildings and the presidential attacks at the presidential attacks attacks at the presidential attacks at the presidential attacks attacks at the presidential attacks attacks at the presidential attacks attacks attacks at the presidential attacks	
	October. Both these cartoons comment on the role of the UN and its Secretary-General in this episode.	0.80
Read t Countr	<b>IE passage given below carefully and answer the questions that follows</b> : ies have conflicts and differences with each other. That does not necessarily mean they must go	:o war to
deal wi	ith their antagonisms. They can, instead, discuss contentious issues and find peaceful solutions, ind	ed, even
though	this is rarely noticed, most conflicts and differences are resolved without going to war. The r	ole of an
interna	tional organization can be important in this context. An international organization is not a super s	tate with
author	ity over its members. It is created by and responds to states. It comes into being when state ag	ee to its
creatio	n. Once created. It can help members states resolve their problems peacefully.	
35.	"The United Nations was not created to take humanity to heaven, but to save it from hell". Who said?	0.80
	(A) Dag Hammarskjold, the UN's 2 <sup>nd</sup> Secretary General	
	(B) Kurt Waldheim, the UN's 4 <sup>th</sup> Secretary General	
	(C) Boutros Boutros-Ghali, the UN's 6 <sup>th</sup> Secretary General	
	(D) Ban-Ki-Moon, the UN's 8 <sup>th</sup> Secretary General	
Ans.:	(A) Dag Hammarskjold, the UN's 2 <sup>nd</sup> Secretary General	0.80
36.	When did India join the United Nations Organisation?	0.80
	(A) October 15,1945	
	(B) October 30,1945	
	(C) NOV.15,1945 (D) October 24 1045	
		0.00
		0.80

Q.NO.	Description of Question	Mark
37.	As the UN completed its 75 years of its existence, the heads of the all the member-states decided to make the UN more relevant in the changing context. Which of the following steps suggested was correct or incorrect? (a)- Creation of a Peace Building Commission (b)-Acceptance of the responsibility of the international community in case of failures of national government to protect their own citizens from atrocities (c) -Establishment of a Human Rights Council (d) -Agreement to achieve the Millennium Development Goals (A)- (a)- Correct, (b)- Correct, (c)- Correct, (d)- Correct (B)- (a)- Correct, (b)- Incorrect, (c)- Correct, (d)- Incorrect (C)- (a)- Correct, (b)- Correct, (c)- Correct, (d)- Incorrect (D)- (a)- Correct, (b)- Correct, (c)- Incorrect, (d)- Correct	0.80
		0.80
38.	Which one of the following Secretary General's second term was blocked by United States of America, due to serious disagreements?(A) Kurt Waldheim(B) Dag Hammarskjold(C) Kofi A. Annan(D) Boutros Boutros Ghali	0.80
39.	<ul> <li>Assertion: Those critics who thought that the state did not do enough. They pointed out that the state did not spend any significant amount for public education and healthcare.</li> <li>Reason : The state intervened only in those areas where the private sector was not prepared to go. Thus, the state helped the private sector to make profit.</li> <li>(A) Both the Assertion and Reason are correct and the Reason is the correct explanation of the Assertion.</li> <li>(B) Both the Assertion and Reason are correct and but the Reason is not the correct explanation of the Assertion</li> <li>(C) The Assertion is incorrect but the Reason is correct.</li> </ul>	0.80
		0.80

40.	Article 51 of the Indian Constitution lays down some Directive Principles of State Policy on 'Promotion of international peace and security'. Which of the following is NOT an endeavour						
	of state?						
	(A)	Promote international peace and security					
	(B)	Maintain just and honoured relations between nations					
	(C)	Foster respect for international law and treaty obligations in the dealings of organized					
	people with one another						
	(D)	Encourage settlement of international disputes by negotiations instead of arbitration.					
			0.80				

Q.NO.	Description of Question	Mark			
41.	Which of the following place is perhaps the largest refuge settlements of Tibetan in India?(A) Mohali (Chandigarh)(B) Okhla (Delhi)				
	(C) Dharmashala (Himachal Pradesh) (D) Leh (Laddakh)				
		0.80			
42.	In April, 1965 Pakistan launched armed attacks in –	0.80			
	(A) Munabab (Barmer, Rajasthan) (B) Bagha border (Amritsar, Punajb)				
	(C) Bhuj (Gujarat) (D) Rann of Kutch Area (Gujarat)				
		0.80			
43.	<ul> <li>Mark correct or wrong against each of the following statements below that describe the way the UN functions-</li> <li>(a) All security and peace related issues are dealt within the Security Council</li> <li>(b) Humanitarian policies are implemented by the main organs and specialized agencies spread across the globe.</li> <li>(c) Having the consensus among five permanent members on security issues is vital for its implementation</li> <li>(d) The members of the General Assembly are automatically the members of all other principal organs and specialized agencies of the UN</li> <li>Choose the correct one:-</li> <li>(A)- (a)-Correct, (b)- Correct, (c)- Wrong, (d)- Correct</li> <li>(B)- (a)-Wrong, (b)- Correct, (c)- Correct, (d)- Wrong</li> <li>(D) (a) Correct, (b)- Wrong, (c) Wrong, (d) Wrong</li> </ul>				
		0.80			

44.	The China war (1962) dented India's image at home and abroad. Which one of the following statements is NOT correct?							
	(A) India had to approach the Americans and British for military assistance to tide over the crisis.							
	(B) The Soviet Union remained neutral during the conflict							
	(C) Nehru's own stature suffered as he was severely criticized for his naïve assessment of the Chinese intentions and the lack of military preparedness.							
	(D) For the first time, a non-confidence motion against the government was moved but could not debated in the Lok Sabha.							
		0.80						
45.	<b>Identify the personality:-</b> Nicknamed as the 'Milkman of India'. Played a crucial role in the story of Gujarat Cooperative Milk and Marketing Federation Ltd. that launched Amul.	0.80						
	(A) Verghese Kurien (B) J C Kumarappa (C) Charan Singh (D) M. S. Swaminathan							
		0.80						
Q.NO.	Description of Question	Mark						

46.	Match the following in context to war in Libya:-					
(a) To exclude Chinese interests in North Africa (i) Political Standpoint						
	(b)	To control oil production	(ii)	Historical Standpoint		
	(c)	To eliminate Muammar Gaddafi	(iil)	Trade Standpoint		
	(d)	To implement the democracy	(iv)	Geopolitical Standpoint		
	(A) – (	a)-(iv),(b)-(iii), (c)-(ii) & (d)-(i) (B) – (a	)-(i),(t	)-(iii), (c)-(ii) & (d)-(iv)		
	(C) – (	a)-(i),(b)-(ii), (c)-(iii) & (d)-(iv) (D) – (a	)-(iv) <i>,</i> (	b)-(ii), (c)-(i) & (d)-(iii)		
47.	Which	one of the following issues (Soft) in Clinton G	overn	ment's foreign policy did not get	0.80	
	focus	?				
	<b>(</b> A) De	mocracy Promotion (B) Climate	Chang	ge		
	(C) Wo	orld Trade (D) Military	powe	r and security		
					0.80	
48.	Which	among the following statements is wrong with re	egard	to 'Operation Iraqi	0.80	
	Freedom'? (A) More than forty countries joined in the US-led coalition of the willing to					
	invade Iraq. (B) The reason given for invading Iraq was to prevent it from developing					
	weapons of mass destruction					
	(C) Th	e action was taken with the prior approval of the L	JN			
	(D) Th	e US-led coalition did not face major resistance fro	m Ira	qi forces		

		0.80		
49.	<ul> <li>49. Which of the following is NOT an outcome of the disintegration of the USSR?</li> <li>(A) End of the ideological war between the US and USSR</li> </ul>			
	(B) Birth of Common Wealth of States (CIS)			
	(C) Change in the balance of power in the world order (D) Crises in the Middle East			
		0.80		
50.	The International Monetary Fund (IMF) as 184 members countries, but they do not enjoy an equal say. The top countries have 55% of the votes. They are-	0.80		
	(A) G-7, Russia, Saudi Arabia & China (B) G-7, United Arab Emirates, Spain & South Africa			
	(C) Russia, G-7, China & India (D) G-7,Brazil, Russia & Portgual			
		0.80		
51.	Mark the correct or incorrect against each of the following statements that describe the features of the military alliances formed by the superpowers.	0.80		
	(A) Members countries of the alliances are to provide bases in their respective lands for the superpowers			
	<b>(B)</b> Members countries to support the superpowers both in terms of ideology and military strategy			
	(C) When a nation attacks any member country, it is considered as an attack on all member countries			
	(D) Superpowers assist all the member countries to develop their own nuclear weapons			
		0.80		
Q.NO.	Description of Question	Mark		

52.	Who among the following leaders reminded the world, non-alignment was a not a policy of 'fleeing away'?				
	(A) Josip Broz Tito (B) Jawahar Lal Nehru				
	(C) Gamal Abdel Nasser (D) Kwame Nkrumah				
			0.80		
53.	The Soviet Union assisted India's public sector companies at a time when such assistance was difficult to get. It gave aid and technical assistance for steel plants. Which group of steep plants got the aid?				
	(A) Bhilai, Bokaro & Vishakhapattnam	(B) Salem, Bokaro & Raurkela			
	(C) Bhilai , Durgapur & Raurkela (D)Bhilai, Bokaro & Durgapur				

54.	Which one of the following state was the first part of India to hold an election based on universal adult franchise?						0.80	
	(A) Kerala (B) Manipur (C) Andhra Pradesh (D) Assam							
							0.80	
55.	Match the following:							
	(a)	Charan Singh		(i)	Industralization			
(b) P C Mahalanobis (ii) First Five Year Plan					First Five Year Plan			
	(c)	Bihar Famines		(iii)	Farmers			
	(d)	K N Raj		(iv)	Zoning			
	<b>Choos</b> (A)- (a (C)- (a	e the correct option:- )-(iii), (b)-(i), (c)-(iv) & (d)-(ii) )-(ii), (b)-(i), (c)-(iv) & (d)-(iii)	(	B)- (a)-(ii (D)- (a)-(i	i), (b)-(iv), (c)-(i) & (d)-(ii) ii), (b)-(i), (c)-(iv) & (d)-(ii)			
							0.80	
56.	Assertion : International organization play a very important role in maintaining peace.         Reason :Countries have conflicts and differences with each other.         (A) Both the Assertion and Reason are correct and the Reason is the correct explanation of the Assertion.         (B) Both the Assertion and Reason are correct and but the Reason is not the correct explanation of the Assertion of the Assertion         (C) The Assertion is incorrect but the Reason is correct (D)         The Assertion is correct but the Reason is incorrect.					n of	0.80	
Q.NO.		Descri	ption o	of Questio	on		Mark	
57.	Match	the principal organs and agencies o	f the l	JN with	their functions:-		0.80	
		PART-A		1	PART-B			
	a.	International Court of Justice	(i)	Overse	as the global financial system			
b.       UN High Commission for Refugees       (ii)       Administration and co-ordination of         UN affairs       UN affairs								
c.         International Monetary Fund         (iii)         Provides shelters and medical h during emergencies								
	d.	Secretariat	(iv)	Resolve among	es disputes between and member countries			
	Choos	e the correct one:-						
	(A)- (a)-(iv), (b)-(iii) , (C)-(i) & (D)-(ii) (B)- (a)-(i), (b)-(iii) , (C)-(ii) & (D)-(iv) (C)- (a)-(iv), (b)-(ii) , (C)-(ii) & (D)-(ii) (D)- (a)-(i), (b)-(ii) , (C)-(iii) & (D)-(iv)							

			0.80		
58.	Fill in the blank:-				
	is an NGO that campaigns for the protection of human rights all over				
	the world. It promotes respect for all the human rights in the Universal Declaration of Human				
	Rights.				
	(A) Human Rights Watch (B) UN Human Rights Council				
	(C) UNICEF (D) Amnesty International				
			0.80		
59.	The three major objectives of Nehru's foreign policy were-		0.80		
	(i) To preserve the hard-earned sovereignty				
	(ii) To protect territorial integrity				
	(iii) To promote rapid economic development				
	(iv) To establish a Capitalist System in India				
	Select the correct option:-				
	(A) -(i), (ii) & (iv) only (B)-(ii), (iii) & (iv) only				
	(C)- (i), (ii) & (iii) only (D)- (ii), (iii) & (iv) only				
			0.80		
60.	Why did the Indian Government sign the treaty with the Soviet Union in 1971?				
	(A) India needed diplomatic and military support during the Bangladesh War of Independence				
	(B) India was very close to USSR				
	(C) India wanted to stay away from the USA				
	(D) For strengthening friendship with USSR				
			0.80		

PRACTICE PAPER : Time – 90 min.

## CLASS XII ENTREPRENEURSHIP (1<sup>ST</sup> SEMESTER 2021) Maximum Marks-35

**General Instructions:** 

- 1. The Question Paper contains three sections.
- 2. Section A has 24 questions. Attempt any 20 questions.
- 3. Section B has 24 questions. Attempt any 20 questions.
- 4. Section C has 12 questions. Attempt any 10 questions.
- 5. All questions carry equal marks.
- 6. There is NO negative marking.

## SECTION : A

- 1. \_\_\_\_\_ is a convenient frames of reference for streamlining the ' Process of generation of ideas'.
  - a. Idea Fields
  - b. Idea Generation
  - c. Problem Identification
  - d. None of these
- 2. The relation of partnership arises from \_\_\_\_\_ and not from status.
  - a. Friendship
  - b. Contract
  - c. Provisions of Act
  - d. None of these
- 3. Which of the following does not include the factors of macro-environment?
  - a. Political and regulatory factors.
  - b. Customer needs in a given market.
  - c. Social and demographic factors.
  - d. Technological changes
- 4. Which of the following formats of business plan is not targeted towards the external stakeholder?
  - a. Elevator pitch
  - b. A pitch deck with oral narrative
  - c. A written presentation for external stakeholders
  - d. An internal operational plan
  - What is the minimum number of members required to start a Private limited company?
    - a. 2

5.

- b. 5
- c. 7
- d. 50
- 6. The Board of Directors of a joint stock company are elected by \_\_\_\_\_
  - a. General public
    - b. Government
    - c. Shareholders
    - d. Employees

- 7. What is the basic test of a successful entrepreneur?
  - a. Identification of business opportunity
  - b. Identification of a problem
  - c. Identification of target market
  - d. Identification of ways to earn profit
- 8. ..... component of a financial plan helps to ascertain the highest possible
  - returns on investment.
    - a. Proforma investment decision
    - b. Proforma income statement
    - c. Proforma cash flow
  - d. Proforma balance sheet
  - Identify the third stage in Opportunity Project Interface.
    - a. Scanning of environment
    - b. Spotting of opportunity
    - c. Starting a project
    - d. Identification of product/service
- 10. Which form of business organisation can commence business immediately
  - after incorporation?

9.

- a. Public company
- b. Private company
- c. Partnership
- d. Sole proprietorship
- 11. What can serve as a basis for formulation of strategies and policies?
  - a. Identifying needs
  - b. Identifying problems
  - c. Identifying strengths and weakness
  - d. Identifying threats and opportunities
- 12. \_\_\_\_\_\_ section of the business plan generally begins with the "mission statement" by the entrepreneur describing the size, scope and nature of the enterprise.
  - a. Description of business Venture
  - b. Introductory profile
  - c. Industry profile
  - d. Entrepreneur's biodata
- 13. Which of the following feature applies ONLY to a public company?
  - a. Can Start business after incorporation
  - b. Has a restriction up to 200 members
  - c. Can invite public to subscribe for its shares
  - d. Directors are not required to obtain qualification shares.
- Which statement is NOT correct about the company form of business organisation?
   a. Company form of business organisation can be incorporated with a minimum of two members.
  - b. Company has an access to huge capital resources
  - c. Company is a legal person
  - d. Company has a separate legal entity.

- 15. An idea should eventually lead to success of the venture of an entrepreneur. Which among the following ideas will an entrepreneur have to select?
  - a. Basic idea
  - b. Any random idea
  - c. Idea developed before environmental scanning
  - d. Idea developed after environmental scanning
  - Nelson started an AC repair shop in his area after doing a diploma course. What
    - idea field is it?

16.

- a. Market driven
- b. Trading related
- c. Service related
- d. Creative efforts
- 17. Identify the third element in the innovation process from the given options.
  - `a. Resource organisation
  - b. Commercial application
  - c. Implementation
  - d. Analytical planning
- 18. As per law, a business and owner are one and same in case of sole proprietorship. What characteristic does this imply?
  - a. No separate legal entity
  - b. Separate legal entity
  - c. Legal entity
  - d. Legal equity
- 19. Karan has learnt the art of zardozi work from his grandfather and father. He opened a designer boutique exclusively for bridal wear all by himself. He introduced new designs in his work which is highly appreciated by everyone.
  - What form of business organisation is operated by him?
  - a. Sole proprietorship
  - b. Partnership
  - c. Private company
  - d. Public company
- 20. Product details include\_\_\_\_\_
  - a. Product Utility
  - b. Product Range
  - c. Precise USP of product
  - d. All the above
- 21. Availability of which of the following items of infrastructure should be mentioned in the business plan.
  - a. Pollution control
  - b. Production process
  - c. Both (a) and (b)
  - d. None of these
- 22. The process of initiating production in accordance with pre-conceived production plan is said to be \_\_\_\_\_
  - a. Routing
  - b. Dispatching
  - c. scheduling
  - d. None of these

- 23. Which of the following plan helps to plan the work in such a manner that one can clearly form an idea about plant layout.
  - a. Operation plan
  - b. Production plan
  - c. Financial plan
  - d. None of these
- 24. It is always advisable to mention in the business plan, the socio-economic benefits expected to acquire from the proposed investment. Identify which of the following is not an economic and social variable.
  - a. Employment generation
  - b. Import substitution
  - c.Land and Building
  - d. Ancillarisation

## SECTION : B

- 25. Sara had established a homemade papad business in Pune. Papads made by her were very popular in her locality but being the sole owner and manager of business, she could neither introduce many flavours because of limited financial resources. Which of the following characteristic of her business, does this situation imply?
  - a. Individual management and control
  - b. Easy formation and closure
  - c. Limited area of operation
  - d. Unlimited liability
- 26. Karan has learnt the art of zardozi work from his grandfather and father. He opened a designer boutique exclusively for bridal wear all by himself. He introduced new designs in his work which is highly appreciated by everyone.
  - What form of business organisation is operated by him?
  - a. Sole proprietorship
  - b. Partnership
  - c. Private company
  - d. Public company
- 27. It is always advisable to mention in the business plan, the socio-economic benefits expected to acquire from the proposed investment. Identify which of the following is not an economic and social variable.
  - (a) Employment generation
  - (b) Import substitution
  - (c)Land and Building
  - (d) Ancillarisation
- 28. Mr. Naman had always wanted to manufacture an innovative energy efficient fan. He was looking into various options and has finally narrowed it down to one option. He understands that the entire Idea would have to follow a process. Identify the process:
  - a. Creativity
  - b. Innovation
  - c. Invention
  - d. None of these

Read the following and answer Question No. 29 to 31

A Courier-Service Company 'Speed-Express' had a varying number of Customers during five weeks. The information regarding the number of customers and the average weekly billing is presented in the following Table.

	8	
WEEK	NO. OF CUSTOMERS	AVERAGE AMOUNT BILLED
		( Per Customer) RS.
1	20	200
2	34	170
3	26	142
4	44	262
5	36	350
TOTAL	160	1,124

- 29. What is the 'Unit of Sale'?
  - a. No. of Weeks
  - b. No. of customers
  - c. No. of Bills
  - d. None of these
- 30. What is 'Unit Price' in this case?
  - a. Billed amount per week
  - b. Average Billed amount
  - c. Total Billed Amount
  - d. None of these
- 31. If the cost of goods sold or variable cost is 60% of the sale price (unit price), calculate the Unit Cost and the 'Gross-Margin' per unit of sale.
  - a. Rs. 235
  - b. Rs. 141
  - c. Rs. 94

32.

- d. None of these
- (i) Each Partner is liable for the acts performed by other partners.

(ii) Each partner can bind other partners and the firm by his/her acts in the normal conduct of business.

Which characteristic of partnership is highlighted in the above statements?

- a. Implied authority
- b. Utmost good faith
- c. Mutual agency
- d. Agreement

Read the following and answer questions 33 and 34

' Flavouright Foods Ltd.' started a business of making nachos (corn chips) in three variants: Classic Cheese, Toasted Corn and Tangy Tomato. To start with, all the three variants will be sold in a standard packing of 100 grams each, the selling price would differ due to the ingredients used. Fixed Costs are Rs. 38,000.

Particulars	Classic Cheese	Toasted Corn	Tangy Tomato	
Selling Price	Rs. 80	Rs. 45	Rs. 60	
Variable Cost	Rs.40	Rs. 15	Rs. 20	

Selling Price and variable costs per unit are as follows:

40 60	)0	Packets sold
-------	----	--------------

- Weighted average contribution margin per product of Flavourite Foods Ltd. is \_\_\_\_\_
   a. Rs. 20
  - b. Rs. 12
  - c. Rs. 38
  - d. None of these
- 34. Break Even Point (in units)of Classic Cheese, Toasted Corn and Tangy Tomato of Flavourite foods Ltd. is \_\_\_\_\_ respectively.
  - a. 500 units, 200 units, 300 units
  - b. 200 units, 500 units, 300 units
  - c. 300 units, 200 units, 500 units
  - d. None of these
- 35. You have planned to start manufacturing a new brand of chocolates aiming at teenagers. Your company 'Delicious' has already been manufacturing and selling biscuits since 2010. The success of biscuits has encouraged you to move into the chocolate industry.

Which of the following is the first step of a successful marketing plan?

- a. SWOT Analysis
- b. Identify the target market
- c. Business situation analysis
- d. None of these
- 36. Amrita started her boutique business near an industrial area and she was not getting clients as she had expected. Which of the following factors have been ignored before starting the boutique?
  - a. Assured market scope
  - b. Practicability of the idea
  - c. Potential of future growth
  - d. All the above
  - 37. Neerav started a factory for manufacturing bags for students of nursery and primary classes. He made the institution plan describing the details that were needed for the operation of machines by the workers.

Identify the format of business plan from the following:

- a. Internal operational
- b. Production plan
- c. Organisational plan
- d. None of these
- 38. Every organisation comes into existence when a number of persons join hands. All these people work to achieve the organizational goals set by the entrepreneur. Human resource is of paramount importance for the success of any organisation.

Identify which of the following helps the organisation in deciding how many people are required to achieve the targets of an enterprise in the above context.

- (i) The total work to be done and how much work can an average person do in a specified time.
- (ii) Level of absenteeism expected and Rate of labour turnover
- (iii) The present number of employees
- (iv) The future plans for expansion
- a. Only (i) and (ii)
- b. Only (i)
- c. Only (iii) and (iv)

- d. All (i), (ii), (iii) and (iv)
- Assertion (A) : The demand assessment will be based on the size of market being targeted.
   Reason (R) : Demand will also involve a study of the target groups of consumers, their preferences, tastes and other related variables.

(a) A is true but R is false.

(b) Both A and R are true, but R is not the correct explanation of A

(c) Both A and R are true and R is the correct explanation of A

(d) Both A and R are false.

- 40. Business opportunity can be described as an economic idea which can be implemented to create a business enterprise and earn profits. Before selecting an opportunity, the entrepreneur has to ensure \_\_\_\_\_
  - (i) There is a good market for the product he/she is going to produce
  - (ii) The rate of return on the investment is attractive to be accepted by him/her
  - (a) Only (i)
  - (b) Only (ii)
  - (c) Both (i) and (ii)
  - (d) Neither (i) nor (ii)
- 41. Assertion (A): The organizational plan is that part of business plan that describes the proposed venture's form of ownership i.e., Sole proprietorship, Partnership, Private co./Public Co. Reason (R) : Each type of business differs significantly in terms of : Commencement procedures, Legal constraints, Financial requirements, Accounting methods, Risk , liability etc. (a) A is true but R is false.

(b) Both A and R are true, but R is not the correct explanation of A

(c) Both A and R are true and R is the correct explanation of A

(d) Both A and R are false.

- 42. Which of the following statements is True?
  - a. Ideas cannot be generated based on natural resources
  - b. Market research is a key factor to maintain competitiveness over competitors.
  - c. Businessmen should not give importance to the idea of long term development
  - d. Entrepreneurial opportunities are restricted only for manufacturing industries.
- 43. One of the keys to business success is to anticipate what the market will want or need. Since it is not possible for an entrepreneur to see into the future, there is one best way. The best way will help the entrepreneur to understand the market and produce goods and services accordingly. Identify the concept stated in the above lines.
  - a. Trend Spotting
  - b. Trend setting
  - c. Trend creating
  - d. None of these
- 44. Given below are the steps of Creative Process. Arrange them in proper order:
  - (i) Preparation
  - (ii) Verification
  - (iii) Incubation
  - (iv)Idea Germination

(v)Illumination

- a. (i), (ii), (iii), (iv), (v)
- b. (iv), (i), (iii), (v), (ii)
- c. (ii), (i), (iii), (v), (iv)
- d. (iv), (iii), (v), (ii), (i)

45. Match the following Natural resources and their potential use:

COLUMNI	CPOLUMN II	
(Natural resources)	(Potential use)	
1.Horticulture	i.Furniture and other wood based products	
2.Medicinal herbs	ii.Selling at a wider scale, to provide to floral	
	decorators	
3.Flowers	iii.Food preservation, canning, freezing and	
	pickling	
4.Lumber	iv.Medicines and Bio Fertilizers	

a. 1 - iii, 2 - iv, 3 - ii, 4 - i

b. 1 - iii, 2 - ii, 3 - iv, 4 - i

c. 1 - ii, 2 - iii, 3 - i, 4 - iv

d. 1 - iv, 2 - iii, 3 - ii, 4 - i

46. Arvind planned to start a small fast food joint in his area after finishing his degree in hospitality management. His plan was to combine and use healthy ingredients like whole wheat flour to make the burger buns. He knew that he had to start collecting information from different sources which will help him to identify the right opportunity to start his business. From where will Arvind get the necessary information?

a. Magazines

b. Shows

c. Family Members

d. All of the above

47. Exploring opportunities in the environment is a process involving various steps.

Arrange the steps in correct order.

i) Evaluating the ideas received from different sources to find a

creative solution

ii) Identifying a product or service through innovation

iii) Opportunity spotting by analysing the needs and problems

that exist in the environment

iv) Setting up a project and nurturing it to success

a. i-ii-iii-iv

b. iii-i-ii-iv

c. ii-iii-iv-i

d. i-iv-iii-ii

48.Victor industries has been one of the leading companies in Mobile phone industry in India. The company decided to launch a new Model AI 1 which will have inbuilt latest software to encourage hands free use and enhance the customer experience through 3D photos. They are also looking into ideas to use eco friendly recyclable materials for the body of the phone which will cause less environmental damage. Identify the two factors of PESTEL model from the above case study.

a. Economic, Social

b. Ecological, Technological

c. Legal, Economic

d. Social, Political

## SECTION: C

- 49. Amaze ltd., is a company engaged in the manufacturing of air- conditioners. The company has four main departments Purchase, Marketing & Sales, Finance and Warehousing. As the demand for the product grew, the company decided to recruit more employees in the Finance department and Marketing & Sales departments. Identify the component of the business plan which will help the Human Resource Manager to decide and recruit the required number of persons for each department.
  - a. Marketing Plan
  - b. Financial Plan
  - c. Manpower Plan
  - d. Organisational Plan
- 50. During the Pandemic, the worst hit were the families who were infected by the virus

and had no source for home cooked nutritious food. 'Khana Khajana' is a multi-cuisine chain of restaurants operating throughout Mumbai by a well-established network of outlets. The owner of the chain understood the concern and started serving 3 course meal to such families on payment basis. The interested customers had to login the website, select their location and set their menu for the day. This service proved to be a great support for suffering families.

What was the source of generation of basic idea?

- a. Innovation
- b. Invention
- c. Problem
- d. Competition
- 51. Bhawna, Maya, and Advik's interior design business was taking off in a big way. Their talent was in high demand. Now, the trio needed to hire more employees. Since the needs of their company were changing, they reviewed their personal circumstances,

finances, and goals.

They decided to legally organize their organization into one with a limited liability. Identify the type of organization the trio will form.

a. Partnership

- b. Public Company
- c. Private Company
- d. Company
- 52. Statement I: A summary of the projected assets, liabilities and net worth of the entrepreneur is depicted through pro forma balance sheet.

Statement II: Procurement of "right person, at right job, at right time" is the objective of Marketing plan.

- a. Statement I is only correct
- b. Statement II is only correct
- c. Both the statements are correct
- d. Statement I is correct and statement II is incorrect

- 53. Bhairavi started a pottery unit employing differently abled people to make and sell sculptors made of clay. She also made sure that the material she used is easily decomposable. During the months of September and October she increased the scale of production as the festival of Diwali was round the corner. Identify the component of business environment at macro level that is reflected in the above situation.
  - a. Political environment
  - b. Technological environment
  - c. Ecological environment
  - d. None of these
- 54. Seema was manufacturing beauty products and was always on the lookout to improvise her products. She used social media and online surveys to understand the latest trend in customer needs and overall in cosmetics industry. Through the surveys, she understood that the customers prefer natural ingredients like multani mitti or neem in place of chemicals in the beauty products.

Responding to customers' needs, she developed "Multani Mitti cum Neem Face Pack" in an attractive package. It was highly priced as she knew that the customers will be ready to pay the price for the quality. Her face pack was an instant success.

Identify the way in which Reema spotted this trend.

- a. Read trend
- b. Talk trend
- c. Think Trend
- d. None of these
- 55. Urvasi, a graduate of Horticulture from Kurukshetra University came across a barren land near Solan when she visited this place. Urvasi was fond of strawberries and was inquisitive to understand the reason why strawberries could not be grown there. She took this as a challenge and believed in its success. Best quality strawberries now mark the beauty of that barren piece of land.

Identify the idea field from where the idea has been generated from the following.

- a. Trading Related
- b. Natural Resources
- c. Service Related
- d. None of these
- 56. Anant and Anandi together took over their family business of making furniture. They understood that the present competitors were using online means to sell their products. They decided on a new idea of providing furniture on a rental basis to offices and households and to also start making furniture using the traditional method which caught the attention of the new generation. They opened stores in various cities and started selling through online mode also. They both are using the \_\_\_\_\_ idea field.
  - a. trading related
  - b. service related
  - c. natural resources
  - d. none of these
- 57. Niranjan wanted to start a business of electronic products but did not have sufficient funds for this. One of his friends suggested him to approach Sudhir who was running a Financing Company. Sudhir asked him to prepare a slide show and give oral narrative that is meant to

trigger discussion and create interest in potential investors while reading the written presentation. Identify the ' format of business plan' discussed above.

- a. Elevator Pitch
- b. a pitch deck with oral narrative
- c. A written presentation
- d. None of these
- 58. Sridhar is a budding rural entrepreneur who is working on improving the health index of the women in rural areas. Samar needs to understand various health issues confronted by women in order to create a socially committed organisation. For this, he wants to gather information about the target market or customers in an organized manner. This organized effort of Sridhar is known as \_\_\_\_\_
  - a. Strategic planning
  - b. Market research
  - c. Environment scanning
  - d. None of these
- 59. Neeru who has done LLB from a renowned Law college wanted to open her own legal consultancy firm with her friend who has completed LLM recently. Neeru discussed the different information of the business plan with her friend stating the authority and responsibility of each member, management team, salary to be given, dress code etc. Identify the type of business plan Mentioned above.
  - a. Organisational plan
  - b. Human resource plan
  - c. Operational plan
  - d. None of these
- 60. Suman started her small-scale business of making Pickles along with few of her neighbors using their free time at home. They named their venture 'Home Sweet Home'. They were able to supply the entire district. One of the members suggested that they should expand and start selling to other states. When she discussed the same to her husband, he suggested that they have to properly look into the environment analysing the competitors. He suggested Suman to
  - a. formulate policies
  - b. Tap useful resources
  - c. Environment scanning
  - d. Image building

XXXXX-----XXXXX------XXXXX

Practice paper -5 class XII

SUBJECT: SOCIOLOGY.

1. When the difference between the birth rate and death rate is 0 or very small, we say that the population has reached the \_\_\_\_\_ level.

A. Replacement level

- B. Negative growth
- C. Natural increase
- D. Displacement level.

2. A falling dependency ratio can be a source of economic growth and prosperity. This is sometimes referred to as \_\_\_\_\_\_.

A benefit dividend

- B prosperity dividend
- C Demographic dividend
- D None of these
- 3. As per child sex ratio the only state below 800:1000 is
- A Punjab
- B Haryana
- C Chandigarh
- D Rajasthan

4 . Malthus believed that famines and disease are the natures way of dealing with the importance between food supply and increasing population. This he referred to as \_\_\_\_\_

- A preventive checks.
- B positive checks.
- C demographic checks.
- D voluntary checks.
- 5. Malthus 's famous theory of population was published in his book
- A .essay on demography
- B .essay on population
- C population and natural checks
- D progression and population

6. Proportion of persons in different age group relative to the population is termed as

- A dividend of population
- B age structure of the population
- C population statistics
- D none of these

7. Government has passed strict laws against sex determination through ultrasound techniques . Identify the act of 1996.

- A. Determination and identification of Foetus. Act
- B. Foetus diagnostic techniques prevention act
- C. Pre-natal diagnostic techniques (regulation and prevention of misuse) Act
- D. None of these .
- 8. According to the theory of the demographic transition India is falling in the category of
- A. First stage
- B. Second stage
- C. Third stage
- D. Fourth stage
- 9. In which decade there was a negative rate of growth of population in India
- A. 1901-11
- B. 1911-21
- C. 1921-31
- D. 1931-41
- 10. The family planning programme suffered a setback during the years of national emergency
- A. 1973-74
- B. 1974-75
- C. 1975-76
- D. 1976-77
- 11. The Vokkaligas are a dominant caste in.\_\_\_\_\_
- A. Bihar
- B. Haryana.

C. Karnataka

- D. Gujrat
- 12. Endogamy refers to\_\_\_\_\_
- A. Marrying within caste.
- B. Inter caste marriage.
- C. Upper caste marriage
- D. Backward caste marriage
- 13. The English word 'caste' is borrowed from Portuguese word casta, meaning \_\_\_\_\_
- A. Status
- **B.** Position
- C. Classification
- D. Pure breed

14. The citizen's of the state like Manipur or Nagaland don't have the same citizen rights as other citizens of India because their states have been declared as.

- A. Outland areas.
- B. Disturbed area.
- C. Crucial area.
- D. None of these
- 15. A family which consists of only one set of a parents and their children is known as.
- A. Matrilocal family.
- B. Extended family.
- C. Nuclear family.
- D. Patrilocal family.
- 16. The hierarchical ordering of castes is based on the distinction between
- A. Occupation and status
- B. Religion and rituals
- C. Norms and authority
- D. Purity and pollution
- 17.the term invisible is associated with the following social group.

- A. High caste people
- B. Middle class people
- C. Newly emerged social group.
- D. Low caste people.
- 18. Societies where women inherit property from their mothers are called\_\_\_\_\_
- A. Maternal societies.
- B. Matriarchal societies.
- C. Matrilocal societies.
- D. Matrilineal societies.
- 19. Trade Reddys and khammas are dominant in---
- A. Haryana.
- B. Bihar.
- C. Andhra Pradesh.
- D. Gujarat.
- 20. The term sanskritisation is coined with one of India's foremost sociologist named
- A. M.N. Srinivas
- B. G.S. Ghurye
- C. D.P. Mukherjee
- D. M.G. Ranade.
- 21. The Nakarattar banking system was a\_\_\_\_\_ banking system
- A. Tribal family
- B. Caste joint family
- C. Village community
- D. None of these

22. The idea of the free market that is a market free from all kinds of regulation whether by state or otherwise was proposed by \_\_\_\_\_

- A. Max weber
- B. Adam Smith
- C. M.N Srinivas

D. B.P. Mandal

24. During the colonial rule the long distance trade in salt was controlled by a marginalised tribal group called.

A. Bohras

B. Banjaras

C. Mundas

D. Vaisyas

25. The capitalist class is able to profit from this system by paying the workers less than the value of what they actually produce and thus extracting from their labour

A. Surplus produce

B. Surplus labour

C. Surplus value

D. Labour power

26. This occurs when things that were earlier not traded in the market become items/services to be sold.

- A. Commodification
- B. Marketisation
- C. Trading
- D. Exchange market
- 27. Another term used for marketisation is---
- A. Globalisation

B. Privatisation

- C. Liberalisation
- D. Industrialisation

28. Classes and status groups are differentiated on the basis of their consumption. Identify the sociologists who was among the first to point out lifestyles----

A. Max weber

- B. Emile Durkheim
- C. Karl Marx
- D. None of these

29. One of the good example of Virtual market is -----

A. Dhorai

B. Pushkar fair

C. Joint family firms

D. Nasdaq

30. Each person looks only their own self interest but in the pursuit of this self interest the interest of society is also looked after Adam Smith called this as "Invisible\_\_\_\_\_"

- A. Brain
- B. Hand
- C. Body
- D. Interest
- 31. It refers to conceived opinions or attitudes held by members of one group towards another
- A. Prejudice
- B. Prefix
- C. Preamble
- D. Predefined
- 32. Sultana's Dream written by Rokeya Shakhawat is one of the example of -- --
- A. Mythology
- B. Family drama
- C. Romantic story.
- D. Science fiction.
- 33. Name the person who founded 'Satya Shodhak samaj'
- A. Dr.BR Ambedkar
- B. Alluri Sitaram Raju
- C. Jotiba Phule
- D. Periyar

34. The ways in which individuals may be cut off from full involvement in the wider society is called as---

A. Social stratification

**B.** Social exclusion

C. Social equality

D. Social inclusion

35. The 1989 Prevention of Atrocities Act revised and strengthened the legal provisions punishing acts of violence or humiliation against

A. Woman

- B. Dalits and Adivasis
- C. Minorities
- D. None of these
- 36. The first Backward classes commission was headed by----
- A. B.P. Mandal
- B. Pandit Nehru
- C. Kaka kalelkar
- D. Ram Manohar Lohia
- 37. Patterns of unequal access to social recourse are commonly called social
- A. Stratification
- **B.** Exclusion
- C. Equality
- D. Inequality

38. One of the earliest law which disallowed the curtailment of rights of citizens due solely to change of their religion or caste is

- A. Prevention of Atrocities Act
- B. Caste Disabilities removal Act
- C. Abolishment of untouchability Act
- D. Legal provisions against humiliation Act

39. Writing entitled "The texts of the Hindu Law on the lawfulness of the Remarriage of widows " is in the credit of

- A. Ishwar Chandra Vidyasagar
- B. Raja Rammohan Roy
- C. Pandita Ramabai

- D. M.G. Ranade
- 40. Stree-Purush Tulana was written by----
- A. Kailashbasini Devi
- B. Tarabai Shinde
- C. Pandita Ramabai
- D. Savitri Bai Phule
- 41. Community identity is based on -----
- A. Nation
- B. Birth
- C. Attitude
- D. Class
- 42. The chief architect of the constitution of India was -----
- A. Dr. B.R. Ambedkar
- B. Mahatma Gandhi
- C. Pandit Nehru
- D. Jyotiba Phule
- 43. Aggressive chauvinism based on religious identity is called --
- A. Communalism
- B. Secularism
- C. Socialism
- D. Communism
- 44. Name the broad Arena which lies beyond the private domain of both state and market -----
- A. Government
- B. Army
- C. Family
- D. Civil society

45. A state is "a body that successfully claims a monopoly of legitimate force in a particular territory according to - ---

A. Karl Marx

B. August Comte

C. Max Weber

D. Jacques Rousseau

46. Policy aimed at persuading, encouraging or forcing all citizens to adopt a cultural values and norms is called as------

A. Assimilation

**B.** Integration

C. Identification

D. Secularisation.

47. One of the activists and scholars of disability Anita Ghai can be compared to the \_\_\_\_\_\_ of Ralph Ellison's novel ----

A. Invisible society

- B. Invisible people
- C. Invisible Man
- D. Invisible discrimination
- 48. Social exclusion is based on the fact that it is ----
- A. Voluntary
- **B.** Involuntary
- C. Desirable
- D. Accepted
- 49. Term Harijan was popularised by
- A. Mahatma Gandhi
- B. Jotiba Phule
- C . Dr. B.R Amberkar
- D. Periyar

50. During colonial rule which one of the following is not a Tribal rebellion against exclusion from access to forest

- A. The Moppila uprising
- B. The santhal Rebellion
- C. The Munda Rebellion
D. Jatra Bhagat and Tana Bhagat Movement



### CLASS-XII

### **SESSION-2021-22**

### PRACTICE SAMPLE PAPER SET-5

Note: Blank OMR Sheet is attached below.



#### DELHI PUBLIC SCHOOL, SAIL TOWNSHIP, RANCHI SESSION - 2021-22 OMR SHEET

General Instructions 1. This sheet should not be folded or of 2. Use only blue/black ball pen 3. Circle should be darkened complete	crushed ely and properly			
NAME:	CLASS/SEC:	ROLL NO:		
EXAM:	SUBJECT:	DATE:		
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Signature of the Student

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Name & Signature of the Invigilator

Signature of the Examiner

### DELHI PUBLIC SCHOOL, RANCHI

Sample Question Paper

Class XII

English Core

Term I

### READING

### I. Read the passage given below:

(1) For four days, I walked through the narrow lanes of the old city, enjoying the romance of being in a city where history still lives—in its cobblestone streets and in its people riding asses, carrying vine leaves and palm as they once did during the time of Christ.

(2) This is Jerusalem, home to the sacred sites of Christianity, Islam and Judaism. This is the place that houses the church of the Holy Sepulchre, the place where Jesus was finally laid to rest. This is also the site of Christ's crucifixion, burial and resurrection.

(3) Built by the Roman Emperor Constantine, at the site of an earlier temple to Aphrodite, it is the most venerated Christian shrine in the world. And justifiably so. Here, within the church, are the last five stations of the cross; the 10th station where Jesus was stripped of his clothes, the 11th, where he was nailed to the cross, the 12th, where he died on the cross, the 13th, where the body was removed from the cross, and the 14th, his tomb.

(4) For all this weighty tradition, the approach and entrance to the church is nondescript. You have to ask for directions. Even to the devout Christian pilgrims walking along the Via Dolorosa—The Way of Sorrows—first nine stations look clueless. Then a courtyard appears, hemmed in by other buildings and a doorway to one side. This leads to a vast area of huge stone architecture.

(5) Immediately inside the entrance is your first stop. It's the stone of anointing : this is the place, according to Greek tradition, where Christ was removed from the cross. The Roman Catholics, however, believe it to be the spot where Jesus' body was prepared for burial by Joseph.

(6) What happened next? Jesus was buried. He was taken to a place outside the city of Jerusalem where other graves existed and there, he was buried in a cave. However, all is long gone, destroyed by continued attacks and rebuilding; what remains is the massive—and impressive—Rotunda (around building with a dome) that Emperor Constantine built. Under this and right in the centre of the Rotunda, is the structure that contains the Holy Sepulchre.

(7) 'How do you know that this is Jesus' tomb?' I asked one of the pilgrims standing next to me. He was clueless, more interested, like the rest of them, in the novelty of it and in photographing it, than in its history or tradition.

(8) At the start of the first century, the place was a disused quarry outside the city walls. According to the gospels, Jesus' crucifixion occurred 'at a place outside the city walls with graves nearby'. Archaeologists have discovered tombs from that era, so the site is compatible with the biblical period.

(9) The structure at the site is a marble tomb built over the original burial chamber. It has two rooms and you enter four at a time into the first of these, the Chapel of the Angel. Here the angel is supposed to have sat on a stone to recount Christ's resurrection. A low door made of white marble, partly worn away by pilgrims' hands, leads to a smaller chamber inside. This is the 'room of the tomb', the place where Jesus was buried.

(10) We entered in a single file. On my right was a large marble slab that covered the original rock bench on which the body of Jesus was laid. A woman knelt and prayed. Her eyes were wet with tears. She pressed her face against the slab to hide them, but it only made it worse.

### Based on your understanding of the passage, answer any eight out of the ten questions by choosing the correct option.

Q.1. How does Jerusalem still retain the charm of the ancient era?

- (A) There are narrow lanes. (B) Roads are paved with cobblestones.
- (C) People can be seen riding assess. (D) All of the above
- Q.2. Holy Sepulchre is sacred to:
- (A) Christianity (B) Islam
- (C) Judaism (D) All of the above

Q.3. Why does one have to constantly ask for directions to the church?

- (A) Its lanes are narrow.
- (B) Entrance to the church is nondescript.
- (C) People are not tourist-friendly.
- (D) Everyone is lost in enjoying the romance of the place.
- Q.4. How many stations were there in the church?
- (A) 10 (B) 14
- (C) 12 (D) 5
- Q.5. Christ was crucified at:
- (A) Jerusalem (B) Tomb
- (C) Church (D) Via Dolorosa

Q.6. Jesus was nailed to the cross at the \_\_\_\_\_.

- (A) 10th station (B) 11th station
- (C) Aphrodite (D) his tomb

Q.7. The courtyard shows ways to \_\_\_\_\_\_.

(A) The way of sorrows (B) a vast area of huge stone architecture

(C) Neither (A) nor (B) (D) Both (A) and (B)

Q.8. Jesus was removed from cross at \_\_\_\_\_\_.

(A) Stone of Anointing (B) Aphrodite

(C) Via Dolorosa (D) None of these

Q.9. Rotunda was built by \_\_\_\_\_.

(A) an emperor (B) an architect

(C) by the Roman Catholics (D) None of these

Q.10. Where was Jesus buried?

(A) In a cave (B) At a place outside the city

(C) In the Holy Sepulchre (D) Both (A) and (B)

### II. Read the passage given below:

(1) Parents of teenagers or preteens should realise the normal struggles with fads, music and other efforts of independence occur in every family. Once they know that, they can relax more and worry less about how their children are "turning out". Chances are they will be just fine and the challenging teen will grow up to be a responsible adult.

(2) In the early years of children's lives, parents are the most important figures in their world. Their approval, love and support are critical to children. Consequently, much of what children do and say is aimed at maintaining that love and approval. As children get older and have more contact with people other than their parents, their behaviours and attitudes will be influenced by other people.

(3) When children are young, many parents maintain control over most aspects of their child's life. These parents choose their child's clothes, friends, hobbies and so on. As children grow older, they

realise they can never grow into adults without having control of their lives. Consequently, teens begin to fight for control.

(4) For teens, this struggle for adulthood is terribly risky because they risk losing the most important thing in their lives — the love of parents. At the same time, parents may feel rejected, hurt and anxious about teens' abilities to care for themselves. Their struggle is stressful because everyone cares so greatly about each other.

(5) A common complaint from teens is that parents "want me to be the way they want me to be." In other words, many parents want a certain career, appearance or college for their teen. These parents experience varying amounts of disappointment and sometimes anger because their children fail to live up to the parents' expectations.

(6) Accepting teens as individuals who will have to make their own decisions about how to be an adult in the world can be extremely hard to do. But the healthy teen will grow up and do just that. Parents who reject their teen for failing to follow the parents' plans or who reject some aspect of their teen's life may find themselves painfully alienated from this person who they care about so much.

(7) A survey was conducted where 500 teenagers were asked a question "What is the one thing your parents can do to make you happier?". The responses of the teenagers are presented in the form a pie chart:



### Based on your understanding of the passage, answer any six out of the eight questions by choosing the correct option.

Q.11. Which of these statements is correct?

(A) Teens begin to fight for respect. (B) Teens begin to fight for trust.

(C) Teens begin to fight for money. (D) Teens begin to fight for control.

Q.12. Why is the struggle for adulthood terrible risky?

(A) They risk losing the bond of friends. (B) They risk losing the trust of siblings.

(C) They risk losing the love of parents. (D) They risk losing the respect for teachers.

Q.13. Which word in the passage means same as 'isolate' (used in Para 6)?

(A) Reject (B) Aspect

(C) Alienate (D) None of these

Q.14. How many teenagers participated in the survey?

(A) 5 (B) 10

(C) 100 (D) 500

Q.15. How many teenagers gave 'money' or 'freedom' as the answer?

(A) 100 (B) 150

(C) 250 (D) 300

Q.16. What percentage of teenagers are happy with their parents and do not wanted anything more from them?

(A) 10% (B) 12%

(C) 28% (D) 50%

Q.17. What are the normal struggles between parents and teenagers?

(A) Efforts of independence (B) Efforts of dependence

(C) Efforts of pre-dependence (D) Efforts of affection

Q.18. Which of the following is an antonym of 'anxious' (as used in Para 4) ?

(A) worried (B) tense (C) restless (D) composed

### WRITING

### III. Answer any four out of the five questions given below.

Q.19. A Notice must contain \_\_\_\_\_\_ information.

(A) factual (B) variety of

(C) meeting (D) object

Q.20. Information about the 'reward' is mentioned in

(A) Notice for the Meeting (B) Notice for the object 'Found'

(C) Notice for the object 'Lost' (D) Notice for the Competition

Q.21. In a missing person/pet advertisement, mentioning of \_\_\_\_\_ must be avoided.

(A) reward (B) character traits

(C) physical features (D) phone number

Q.22. Where do you write Salutation in the Notice?

(A) Just above the date (B) Just below the date

(C) Beside the date (D) Salutation is not written in the Notice.

Q.23. Which of the following statements is INCORRECT for Classified Advertisements?

(A) Word limit: 50 words (B) Costs more than Display Advertisement

(C) Subscription is not written (D) It is put up in a box

IV. Answer any six of the seven questions given below.

Q.24. Concluding paragraph of an Article should never:

(A) be open ended (B) have food for thought.

(C) give way to a planned action. (D) sum of all the stated points.

Q.25. Which of the following should be added to make an Article effective?

(A) Quotes (B) Statistics

(C) Anecdotes (D) All of the above

Rising prices of essential commodities make life difficult for the common man. You are Nalini/ Ranbir. Write an article in 150-200 words describing the causes, possible solutions and how students can help their parents to cope with the problem.

(26) \_\_\_\_\_

-by Nalini

Prices are ever on the increase. A rise in price, economists say, is a sign of development and prosperity. However, during the last two decades, prices of almost all the essential commodities have been increasing at an alarming rate. These soaring prices have caused great unrest and frustration among the people. The people belonging to the middle class and the salaried people are hit hard. All the more, (27)

\_\_\_\_ and an open challenge to the government. It has shaken the faith of the people in the government. There is no let-up in the situation. Life has become very hard. Not to speak of rising prices, things of daily use are sometimes not available in the market. Big businessmen hoard things and sell them in black. Adulteration of eatables is a big health hazard. The prices of petrol, cooking gas, kerosene oil and several other items of daily use are increasing every year. Not only that, the railway fares, air fares and bus and taxi charges are also increasing regularly. The rich make a display of their wealth while the poor find it difficult to make both their ends meet. (28) .The indiscriminate rise in prices of essential commodities has left many a people tense and helpless. No one can foresee what is in store for the common people. There are many causes of the unprecedented rise in prices. It is the duty of the government to bring down the prices of the essential commodities. (29) \_\_\_\_\_ Black marketers, hoarders and profiteers must be booked. Family Planning programmes should be stepped up to check over-population. More fair-price shops should be opened in different localities. There should be an equitable distribution through the fair price shops. Shopkeepers should be directed to display the stock of essential commodities along with their prices. Those people who buy things in the black market should be punished. Production of food should be increased. Sincere efforts should be made to stabilize prices of essential commodities. Evils of corruption, bribery, smuggling and illegal gratification deep-rooted in the society must be rooted out. We \_\_\_\_\_. Let us hope that the government as students (30) will be able to bring down the soaring prices. The government has, in recent past, taken some steps to control the prices to revamp the

economy of the country. The government efforts have met a partial success and inflation has been controlled to some extent.

Q.26.

(A) Rising Prices: An Ordeal for Common Man

(B) High Prices: An Order for Lay Man

(C) Essential Commodities

(D) Cope with the Problem

Q.27.

(A) the searing prices become a big thread

(B) the soaring prices become a big thread

(C) the soaring prices have become a big threat

(D) the searing prizes have become a big threat

Q.28.

(A) Life has lost its charming for the bread-winner.

(B) Life has lost its warmth for the average bread-earner.

(C) Life has lost its warmth for the normal bread-winner.

(D) Life has lost its charm for the average bread-winner.

Q.29.

(A) Inflation, black - marketing, hoarding, over - population, increasing demands, natural factors like

flood, droughts, Social evils, breaking of joint - family system, corruption

(B) Black - marketing, hoarding, corruption, nuclear families, increase in population, luxurious life

style, high taxation, poverty.

(C) Over- population, high salaries, corruption, earthquakes or floods, dowry system, wastage of

food in parties and marriages, faulty credit - system

(D) Corruption, black- marketing, hoarding, credit system, easy loans, scams, population control,

system of distribution, new economic policies, better wages

Q.30.

(A) can nab the people hoarding and black marketing the essential commodities.

(B) can protest against the corrupt leaders and officials.

(C) can help our parents reducing food wastage and minimizing our demands.

(D) can help the police by informing them about the hoarders and black-marketeers.

### LITERATURE

# This section has sub-sections: V, VI, VII, VIII, IX. There are a total of 30 questions in the section. Attempt any 26 questions from the sub-sections V to IX.

### V. Read the given extract to attempt questions that follow:

Then all efforts ceased. I relaxed. Even my legs felt limp; and a blackness swept over my brain. It wiped out fear; it wiped out terror. There was no more panic. It was quiet and peaceful. Nothing to be afraidof. This is nice... to be drowsy... to go to sleep... no need to jump... too tired to jump... it's nice to be carried gently... to float along in space... tender arms around me... tender arms like Mother's... now I must go to sleep... I crossed to oblivion, and the curtain of life fell. Q.31. Choose the correct option with reference to the two statements given below.

Statement 1: The author tried his best to jump out of water.

Statement 2: After a while, the author was not anxious in water.

(A) If Statement 1 is the cause, Statement 2 is the effect.

(B) If Statement 1 is the effect, Statement 2 is the cause.

(C) Both the statements are the effects of a common cause.

(D) Both the statements are the effects of independent causes.

Q.32. The 'curtain of life fell' corresponds to an aspect of:

(A) Geometry (B) History

(C) Sports (D) Drama

Q.33. The purpose of using "..." in the above passage is to:

(A) show omission (B) indicate pauses

(C) shorten a dialogue (D) replace an idea

Q.34. Which option indicates that the poet lost consciousness?

(A) 'It was quiet and peaceful'. (B) 'I crossed to oblivion.'

(C) 'Tender arms like Mother's.' (D) 'It wiped out fear.'

Q.35. "It wiped out fear, it wiped out terror." What is 'it' here?

(A) Conscious state (B) Unconscious state

(C) Deep sleep induced by a psychiatrist. (D) Unable to think properly.

VI. Read the given extract to attempt questions that follow:

In the afternoon, the second thing happened. Hana, working hard on unaccustomed labour, saw a messenger come to the door in official uniform.

Q.36. Which day had two things happened?

(A) The day the war broke.

(B) The day of the arrival of the American prisoner.

(C) The day Japan won the war.

(D) The seventh day after the arrival of the American prisoner.

Q.37. What was the second thing that happened on the very day?

(A) His servants left (B) General sent him a message

(C) Received a message from the office (D) None of these

Q.38. Which of the following was giving trouble to the General?

(A) Liver (B) Heart

(C) Gall bladder (D) Lungs

Q.39. Why was Hana working in spite of having servants?

(A) The servants were on leave. (B) The servants had gone to buy groceries.

(C) The servants had left the job. (D) The servants had died.

Q.40. Sadao and Hana have a moral compass which urges them to save the prisoner's life paving way

for \_\_\_\_\_.

(A) a harmonious society (B) a liberal nation

(C) equal rights for everyone (D) global help

VII. Read the given extract to attempt questions that follow:

Now we will count to twelve

and we will all keep still.

For once on the face of the Earth

Let's not speak in any language,

Let's stop for one second and not move our arms so much.

- Q.41. What is the significance of the number 'twelve'?
- (A) Measure of distance (B) Measure of capacity
- (C) Measure of gravity (D) Measure of time
- Q.42. Which two activities does the poet want us to stop?
- (A) Speak and Move (B) Move and Eat
- (C) Speak and Dance (D) Move and Sleep
- Q.43. What does the poet mean by 'let's not speak in any language'?
- (A) To be silent (B) To be dump
- (C) To be unconscious (D) To be straight
- Q.44. What is the pun in the word 'arms'?
- (A) Human organs (B) Destructive weapons

(C) Both (A) and (B) (D) None of these

Q.45. Which poetic device can you spot in the last two lines of the stanza?

(A) Metaphor (B) Simile

(C) Anaphora (D) Transferred Epithet

### VIII. Read the given extract to attempt questions that follow:

### 'I cannot bear for you to touch him,' she said. 'We shall have to tell the servants he is here. I will tell Yumi now. She can leave the children for a few minutes and she can wash him.'

Q.46. Who is the speaker of the above lines?

- (A) Dr. Sadao (B) Hana
- (C) Bama (D) Kamala Das
- Q.47. Why is 'he' needed to be washed?
- (A) Too dirty (B) Filled with blood
- (C) Covered in oil (D) Body washed with salt water

Q.48. Who was Yumi?

(A) Teacher (B) Colleague

(C) Servant (D) Doctor

Q.49. Who did eventually wash 'he'?

(A) Dr. Sadao (B) Hana

(C) Yumi (D) Yumi's mother

Q.50. 'She did not wish to be left alone with the white man.'

Why did Hana feel so, despite having studied in America?

(A) being married, it wasn't appropriate to stay on with a stranger.

(B) America and Japan were not supporters in the ongoing World War.

(C) He was someone she'd recognised from her past in America.

(D) Her husband had warned her against the American.

### IX. Attempt the following.

Q.51. What explanation is given by the people, to Anees Jung, for staying barefoot?

(A) Religious barrier (B) Traditional way of acceptance

(C) Lack of money (D) Social demarcation

Q.52. While the class was in motion, why did M. Hamel sit motionless?

(A) He wanted to inscribe this classroom scene in his mind.

(B) He was very tired after giving lecture.

(C) He was worried about the German attack.

(D) He was invigilating the test.

Q.53. Why did Saheb feel the weight of the steel canister but not that of the plastic bag used for rag

picking?

(A) The steel canister was filled with milk which made it heavy.

(B) The rags were weightless.

(C) Saheb didn't like to work on the tea stall.

(D) All of the above.

Q.54. What suggestion did M. Hamel give to his class full of pupils?

(A) To attend the lessons regularly.

(B) To be focused while learning their language.

(C) To promote the slogan, 'Long Live France'.

(D) To safeguard their language and not let it perish.

Q.55. Driving from my parent's

home to Cochin last Friday

Why did the poet use 'last Friday' specifically?

(A) To show that the poet had to commence her job from the next week.

(B) To emphasise overarching idea of things coming to an end.

(C) To show that the poet travelled on weekends.

(D) Friday is poet's favourite day of the week.

Q.56. Which figure of speech can you spot in, 'slums as big as doom'.

(A) Simile (B) Metaphor

(C) Alliteration (D) Personification

Q.57. When the poet wishes to avert her attention from the reminder of ageing and death, she chooses

to look at "young" trees and "young" children, signifying youth and life. This striking sharp contrast accentuates \_\_\_\_\_

(A) the poet's talent to shift the tone from depression to excitement.

(B) the poet's ability of being observant.

(C) the poet's art of comparison.

(D) the poet's desperate attempt to escape harsh realities of life.

Q.58. The essence of 'Keeping Quiet' is based on \_\_\_\_\_.

(A) introspection (B) inspection

(C) searching (D) looking around

Q.59. The value of a newly issued stamp increases if it has the post mark of the date of issue on it. Therefore, the stamp collectors buy new stamps on the very first day of its sale and paste them on self– addressed envelopes and post them. These envelopes are called the

(A) First-week covers (B) First-hour covers

(C) First-year covers (D) First-day covers

Q.60. Sam's quiet business of hay, feed and grain would give him

(A) satisfaction and enjoyment (B) peace and contentment

(C) less profit but more satisfaction (D) more profit but less satisfaction

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6.	If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ (a) 2	is : ( <i>b</i>
6. 7.	If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ (a) 2 Which of these relat	is a ( <i>t</i>
6.	If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ (a) 2 Which of these relat (a) $R_1 = \{(1, 1), (1, 3)\}$	is ( <i>b</i> ion 2)
6.	If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ (a) 2 Which of these relat (a) $R_1 = \{(1, 1), (1, (b), R_2 = \{(1, 4), (2, (c), (c), (c), (c), (c), (c), (c), (c)$	is ( <i>b</i> ion 2)
6.	If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ (a) 2 Which of these relat (a) $R_1 = \{(1, 1), (1, (1, (1, (1, (1, (1, (1, (1, (1, (1$	is ( <i>t</i> ion 2) 2)
6.	If $\begin{bmatrix} \cos 3\alpha & \sin 3\beta \\ \sin 3\beta & \cos 3\alpha \end{bmatrix}$ (a) 2 Which of these relat (a) $R_1 = \{(1, 1), (1, (1, (1, 1)))$	is ( <i>t</i> ion 2) 2) 2)

# SECTION - A

In this section, attempt any 16 questions out of Questions 1-20.  $1^{-1}z = \frac{3\pi}{2}$ , then the value of  $x + y^2 + z^3$  is 5) 3 (c) 2(d) 5  $\frac{1}{5}$ , is not a continuous function for x equals to (c)  $R - \{5\}$  (d) 0 is singular matrix, for k equal to (c) 1 b) -1 (d) no value of kric matrix then  $A^2$  is a diagonal matrix (b) (d) skew symmetric matrix  $e^2 e^{-x}$ , then 'f' increases in the interval b) (-2, 0) (c)  $(2, \infty)$ (d) (0, 2)an identify matrix, then  $\alpha + \beta =$ (c) 0 b) -2 (d) not defined is on set A where  $A = \{1, 2, 3, 4\}$  are equivalence relation? (2, 1), (2, 2), (3, 3), (3, 4), (4, 3), (4, 4)(3, 3), (4, 1), (4, 2), (4, 4)), (1, 3)}

(1, 4), (2, 2), (2, 4), (3, 3), (4, 1), (4, 4)

8. If 
$$A = [a_{ij}]$$
 is a 2 × 3 matrix, such that  $a_{ij} = \frac{(-2i+3j)^2}{3}$  then  $a_{23} =$   
(a)  $\frac{16}{3}$  (b)  $\frac{9}{4}$  (c)  $\frac{15}{4}$  (d)  $\frac{25}{3}$   
9. The line  $y = x + 1$  is a tangent to the curve  $y^2 = 4x$  at the point  
(a)  $(-1, 2)$  (b)  $(1, 2)$  (c)  $(1, -2)$  (d)  $(2, 1)$   
10. If  $\sin^{-1}x = y$ , then  
(a)  $0 \le y < \pi$  (b)  $-\frac{\pi}{2} \le y \le \frac{\pi}{2}$  (c)  $0 < y < \pi$  (d)  $-\frac{\pi}{2} < y < \frac{\pi}{2}$ 

11. Let  $f: R \rightarrow R$  and is defined by

 $f(x) = \{| \sin x |\}, \text{ where } \{x\} \text{ represent fractional part of } x.$ Let S be the set containing all real values x lying in the interval [0, 2 $\pi$ ] for which

 $f(x) \neq |\sin x|. \text{ Then}$ (a) sum of all elements of set S is  $2\pi$ . (b) S contains infinitely many elements. (c)  $f(x) - |\sin x| = 0, \forall x \in [0, 2\pi]$  (d) none of these. 12.  $\frac{d}{dx}(x^x)$  is equal to (a)  $x^{x-1}$  (b)  $x \log x$  (c)  $x^x(1 + \log x)$  (d)  $xx^{x-1}$ 13. If  $A = \begin{bmatrix} 0 & 2 \\ 3 & -4 \end{bmatrix}$  and  $kA = \begin{bmatrix} 0 & 3a \\ 2b & 24 \end{bmatrix}$ , then the values of k, a, b are respectively. (a) -6, 12, 18 (b) -6, -12, -18 (c) -6, 4, 9 (d) -6, -4, -9 14. If  $x = at^2$ , y = 2at, then  $\frac{d^2y}{dx^2}$  is (a)  $\frac{1}{t}$  (b)  $-\frac{1}{t^2}$  (c)  $at^2$  (d)  $\frac{-1}{2at^3}$ 

**15.** If 
$$A = \begin{bmatrix} 1 & 4 & 3 \\ 1 & 3 & 4 \end{bmatrix}$$
 then  $(A \text{ adj } A) =$   
(a)  $I$  (b)  $2I$  (c)  $3I$  (d)  $-I$   
**16.** The curve  $y = x^{\frac{1}{5}}$  has at (0, 0)  
(a) a vertical tangent (parallel to y-axis) (b) a horizontal tangent (parallel to x-axis)  
(c) an oblique tangent (d) no tangent  
**17.** Given matrix  $A = \begin{bmatrix} 3 & -1 & 2 \\ 4 & 5 & 9 \\ 1 & 3 & 4 \end{bmatrix}$ , then the value of  $3a_{22} - 4a_{33}$  is  
(a)  $-1$  (b) 8 (c) 11 (d) 3

18. The derivative of  $\tan^{-1}\left(\frac{1+x}{1-x}\right)$  with respect to x is (a)  $\frac{1}{1+x^2}$  (b)  $\frac{2}{1+x^2}$  (c)  $\frac{1}{1-x^2}$  (d)  $\frac{2}{1-x^2}$ 19. Solution of *LPP* To maximise Z = 4x + 8ysubject to constraints :  $2x + y \le 30, x + 2y \le 24, x \ge 3, y \le 9, y \ge 0$  is (a) x = 12, y = 6 (b) x = 6, y = 12 (c) x = 9, y = 6 (d) none of these 20. If x lies in the interval [0, 1] then minimum value of  $x^2 + x + 1$  is (a)  $\frac{3}{4}$  (b) 1 (c) 3 (d) 2

### **SECTION – B**

### In this section, attempt any 16 questions out of the Questions 21-40.

- 21. Let R be a relation on the set L of lines defined by  $l_1 R l_2$  if  $l_1$  is perpendicular to  $l_2$ , then relation R is
  - (a) reflexive and symmetric
- (b) symmetric and transitive

(c) equivalence relation

(d) symmetric

22. If 
$$y = t^{20} + 1$$
 and  $x = t^{16} + 1$  then  $\frac{d^2 y}{dx^2} =$   
(a)  $\frac{15}{2}t$  (b)  $\frac{15}{16}t^{12}$  (c)  $\frac{5}{16t^{12}}$  (d)  $\frac{5}{16}t^{12}$ 

23. The corner points of the feasible region determined by the system of linear constraints are (0, 10), (5, 5), (15, 15), (0, 20). Let Z = px + qy, where p, q > 0. Condition on p and q so that the maximum of Z occurs at both the points (15, 15) and (0, 20) is

(d) 
$$p = q$$
 (b)  $p = 2q$  (c)  $q = 2p$  (d)  $q = 3p$   
24. Derivative of  $\frac{x}{2}\sqrt{a^2 - x^2} + \frac{a^2}{2}\sin^{-1}\frac{x}{a}$  with respect to x is  
(a)  $\sin^{-1}\frac{x}{a}$  (b)  $\frac{x}{2}\sqrt{a^2 - x^2}$  (c)  $\sqrt{a^2 - x^2}$  (d)  $\frac{1}{\sqrt{a^2 - x^2}}$   
25. Using the concept of inverse of matrix, solve the matrix equations  $\begin{bmatrix} 4 & 2 \\ -7 & 5 \end{bmatrix}A = \begin{bmatrix} -1 & 2 \\ 0 & 4 \end{bmatrix}$  then  
 $A =$   
(a)  $\begin{bmatrix} 5 & -2 \\ -7 & 4 \end{bmatrix}$  (b)  $\frac{1}{6}\begin{bmatrix} -5 & 2 \\ -7 & 30 \end{bmatrix}$  (c)  $\begin{bmatrix} -5 & 2 \\ -7 & 30 \end{bmatrix}$  (d)  $\frac{1}{6}\begin{bmatrix} 5 & -2 \\ -7 & 4 \end{bmatrix}$ 

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26. The interval for which the function 
$$f(x) = \cot^{-1}x + x$$
 increases is  
(a) (0, 1] (b) [1, 2] (c)  $(-\infty, \infty)$  (d)  $[-\infty, 1]$   
27. The value of  $2\left[\sin^{-1}\left(-\frac{1}{2}\right) + \cos^{-1}\left(-\frac{1}{2}\right)\right]$  is  
(a)  $2\pi$  (b)  $\frac{\pi}{2}$  (c)  $\pi$  (d)  $-\pi$   
28. If A is a non singular matrix, then  $(A^3)^{-1} =$   
(a)  $A^{-1}$  (b)  $(AI)^3$  (c)  $2(A^{-1}I)^3$  (d)  $(A^{-1})^3$ 

29. If the curve  $ay + x^2 = 7$  and  $x^3 = y$ , cut orthogonally at (1, 1), then the value of a is

(c) -6(d) 6(b) 0 (a) 1

30. If 
$$f(x) = \frac{x-1}{|x-1|}$$
,  $x(\neq 1) \in R$  then range of 'f' is  
(a)  $\{-1, 1\}$  (b)  $\{-1\}$  (c)  $R$  (d) 1  
31. The function  $f(x) = \frac{x+1}{1+\sqrt{1+x}}$  is continuous at  $x = 0$  if  $f(0)$  is  
(a)  $-1$  (b)  $\frac{1}{2}$  (c)  $0$  (d)  $1$   
32. If  $A = \begin{bmatrix} 5 & x \\ y & 0 \end{bmatrix}$  and  $A = A'$  then  
(a)  $x = 0, y = 5$  (b)  $x = y$  (c)  $x + y = 5$  (d)  $x - y = 5$ 

33. The objective function for an LPP is given as Z = 4x + 3y. The corner points of the feasible region determined by the system of linear constraints are (0, 0), (0, 40), (20, 40), (60, 20) and (60, 0).

Compare the quantity in column I and column II.

Column I	Column II
Maximum of $Z$	. 325

- (a) The quantity in column I is greater than the quantity in column II.
- (b) The quantity in column II is greater than the quantity in column I
- (c) quantities in both the columns are equal
- (d) cannot be determined

(a)  $A^{-1}$ 

34. Tangent to the curve  $(x - 2)^4 + (y - 1)^4 = 81$  at point (5, 1) is (a) 2x + y = 1 (b) x + 5y = 10 (c) y = 1 (d) x = 5

35. If 
$$A = \begin{bmatrix} 1 & 3 \\ 3 & 2 \\ 2 & 5 \end{bmatrix}$$
 and  $B = \begin{bmatrix} -1 & -2 \\ 0 & 5 \\ 3 & 1 \end{bmatrix}$  and  $A + B - D = 0$  (zero-matrix), then  $D$  matrix will be  
(a)  $\begin{bmatrix} 0 & 1 \\ 3 & 7 \\ 5 & 6 \end{bmatrix}$  (b)  $\begin{bmatrix} 0 & -2 \\ -3 & -7 \\ -5 & -6 \end{bmatrix}$  (c)  $\begin{bmatrix} 0 & 2 \\ 3 & 7 \\ 5 & 6 \end{bmatrix}$  (d)  $\begin{bmatrix} 0 & 2 \\ 3 & 7 \\ 6 & 5 \end{bmatrix}$   
36. If  $\tan^{-1} x = \sin^{-1} \left(\frac{1}{\sqrt{2}}\right)$ , then  $x$  is  
(a)  $\frac{5\pi}{4}$  (b) 1 (c)  $\frac{3\pi}{4}$  (d)  $\frac{\pi}{4}$   
37. Let  $A = \{1, 2, 3\}$  and relation  $R$  defined on set  $A$  is given by  $R = \{(1, 2), (2, 1)\}$  then  $R$  is  
(a) transitive (b) symmetric (c) reflexive (d) none of these

38. If  $A = |\sin \theta | \cos \theta$ (b)  $\begin{bmatrix} -\sin\theta & \cos\theta \\ \cos\theta & \sin\theta \end{bmatrix}$  $(a) \begin{bmatrix} \cos \theta & -\sin \theta \\ \sin \theta & \cos \theta \end{bmatrix}$  $(d) \begin{bmatrix} \sin \theta & \cos \theta \\ \cos \theta & -\sin \theta \end{bmatrix}$  $(c) \begin{bmatrix} \cos \theta & \sin \theta \\ -\sin \theta & \cos \theta \end{bmatrix}$ 39. The tangent to the curve  $y = e^{3x}$  at the point (0, 1) meets the x-axis at (a) (0, 1) (b) (3, 0) (c)  $\left(-\frac{1}{3}, 0\right)$  (d)  $\left(-\frac{1}{3}, 1\right)$ 40. If  $A = \begin{bmatrix} \frac{1}{3} & \frac{2}{3} & \frac{7}{3} \\ \frac{5}{3} & \frac{4}{3} & \frac{8}{3} \end{bmatrix}$  and  $B = \begin{bmatrix} \frac{2}{5} & 1 & 5 \\ \frac{5}{5} & \frac{1}{5} & \frac{5}{5} \end{bmatrix}$ Then 3A + 5B = $(a) \begin{vmatrix} \frac{5}{3} & \frac{3}{4} & \frac{7}{11} \\ \frac{12}{11} & \frac{9}{11} & 5 \end{vmatrix} (b) \begin{vmatrix} 9 & 18 & 21 \\ 15 & 16 & 90 \end{vmatrix} (c) \begin{vmatrix} 3 & 7 & 32 \\ 11 & 11 & 17 \end{vmatrix} (d) \begin{vmatrix} 3 & 7 \\ 11 & 18 \end{vmatrix}$ **SECTION - C** In this section, attempt any 8 questions. Questions 46-50 are based on a Case-Study. 41. The graph of the inequality 2x + 3y > 6 is (a) half plane that contains the origin. (b) half plane that neither contains the origin nor the points of the line 2x + 3y = 6(c) where x = 6(c) whole XOY - plane excluding the points on the line <math>2x + 3y = 6. (d) entire XOY plane. 42. The equation of tangent to the curve  $y(1 + x^2) = 2 - x$ , where it crosses x-axis is (a) (a) x + 5y = 2(b) x - 5y = 2 (c) 5x - y = 2 (d) 5x + y = 2Mathematics 207

- 43. If at x = 1, the function  $f(x) = x^4 62x^2 + ax + 9$  attains its maximum value on the interval [0, 2]. Then the value of a is
  - (a) 124 (b) -124 (c) 120 (d) -120
- 44. The corner points of the bounded feasible region of a LPP are A(0,50), B(20, 40), C(50, 100) and D(0, 200) and the objective function is Z = x + 2y. Then the maximum value is
  (a) 100
  (b) 400
  (c) 250
  (d) 450
- 45. What positive value of x makes the following pair of determinants equal?
  - $\begin{vmatrix} 2x & 3 \\ 5 & x \end{vmatrix} \begin{vmatrix} 16 & 3 \\ 5 & x \end{vmatrix} \begin{vmatrix} 16 & 3 \\ 5 & 2 \end{vmatrix}$ (a) 4
    (b) -4
    (c) 3
    (d) -3

### CASE STUDY

The shape of a toy is given as  $f(x) = 6(2x^4 - x^2)$ . To make the toy beautiful 2 sticks which are perpendicular to each other were placed at a point (2, 3), above the toy.



46. Which value from the following may be abscissa of critical point?

(a) 
$$\pm \frac{1}{4}$$
 (b)  $\pm \frac{1}{2}$  (c)  $\pm 1$  (d) None

47. Find the slope of the normal based on the position of the stick.

(a) 360 (b) -360 (c) 
$$\frac{1}{360}$$
 (d)  $\frac{-1}{360}$ 

48. What will be the equation of the tangent at the critical point if it passes through (2, 3)?

(a) 
$$x + 360y = 1082$$
  
(b)  $y = 360x - 717$   
(c)  $x = 717y + 360$   
(d) none  
49. Find the second order derivative of the function at  $x = 5$ .  
(a) 598  
(b) 1176  
(c) 3588  
(d) 3312  
50. At which of the following intervals will  $f(x)$  be increasing?  
(a)  $\left(-\infty, -\frac{1}{2}\right) \cup \left(\frac{1}{2}, \infty\right)$   
(b)  $\left(-\frac{1}{2}, 0\right) \cup \left(\frac{1}{2}, \infty\right)$   
(c)  $\left(0, \frac{1}{2}\right) \cup \left(\frac{1}{2}, \infty\right)$   
(d)  $\left(-\infty, -\frac{1}{2}\right) \cup \left(0, \frac{1}{2}\right)$ 

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#### Delhi Public School, Ranchi Sample Paper II Subject: Physics (042)

**Time: 90 Minutes** 

Max. Marks 35

General Instructions:

- 1. The Question Paper contains three sections.
- 2. Section A has 25 questions. Attempt any 20 questions.
- 3. Section B has 24 questions. Attempt any 20 questions.
- 4. Section C has 7 questions. Attempt any 5 questions.
- 5. All questions carry equal marks.
- 6. There is no negative marking.

### SECTION A

## This section consists of 25 multiple choice questions with overall choice to attempt any 20 questions. In case more than desirable number of questions are attempted, ONLY first 20 will be considered for evaluation.

- 1. A force of 4N is acting between two charges in air. If the space between them is completely filled with glass (relative permittivity = 8), then the new force will be
  - a) 2N b) 5N c) 0.2N d) 0.5N
- 2. A charge q is placed at the center of the line joining two equal charges Q. The system of three charges will be in equilibrium if q is equal to
  - a) –Q/2 b) –Q/4 c) Q/4 d) Q/2
- 3. If an electron is brought towards another electron, the electric potential energy of the systemA) increasesB) decreasesC) becomes zeroD) remains the same
- 4. Equal charges are given to two spheres of different radii. The potential will:
  - A) Be more on bigger sphere B) Be more on smaller sphere
    - C) Be equal on both the spheres
    - D) Depend on the nature of the materials of the spheres
- 5. A parallel plate capacitor is charged by a battery. Once it is charged battery is removed. Now a dielectric material is inserted between the plates of the capacitor, which of the following does not change? (a) electric field between the plates (b) potential difference across the plates (c) charge on the plates (d) energy stored in the capacitor
- 6. Four capacitors, each of 2  $\mu$ F, are connected as shown. What will be the equivalent capacitor across the points A, B?



(D) 4 Mf

7.	path followed by free	followed by free electrons in conductor, when it is placed in an external electric field is:				
	a. Straight line	b. Circular	c. Curved path	d. Elliptical		
8.	A cell of emf 8V with Terminal Potential dro	small finite internal re pacross the cell while	sistance is charged with charging would be:	the help of an external battery.		
	a. Greater than 8 V	b. Less than 8 V	c. Zero	d. Equal to 8 V		
9.	An electric current is parallel. If the lengths current passing throug	An electric current is passed through a circuit containing two wires of same material, connected in parallel. If the lengths and radii of the wires are in the ratio of 3:2 and 2:3, then the ratio of the current passing through the wire will be				
	a. 2:3	b. 3:2	c. 8:27	d. 27:8		
10.	Which of the following	statements is correct	?			
	(a) A charged particle	can be accelerated by a	a magnetic field. (			
	b) A charged particle of	annot be accelerated b	by a magnetic field.			
	(c) The speed of a char	rged particle can be inc	creased by a uniform mag	gnetic field		
	(d) The speed of a cha	rged particle can be inc	creased by a nonuniform	magnetic field.		
11.	A proton moves hori deflected	zontally towards a ve	rtical conductor carryin	g a current upwards. It will be		
	(a) to the left	(b) to the right	(c) upwards	(d) downwards		
12.	If we increase the nur sensitivity?	nber of turns of the co	oil of the moving coil gal	vanometer what happens to the		
	A)Current sensitivity r	emains constant but vo	oltage sensitivity changes	i		
	B) Current sensitivity	increases but voltage s	sensitivity remains same			
	C)Both of them increa	se		D) No change in them		
13.	Which of the following	g statement is not corre	ect about the magnetic fi	eld?		
	<ul><li>(a) Magnetic field lines form a continuous closed curve.</li><li>(b) Magnetic field line do not interest each other.</li></ul>					
	(c) Direction of tanger field at that point.	nt at any point on the	magnetic field line curve	e gives the direction of magnetic		
14	What is the strength o	f magnetic field known	n as			
	a) Magnetic flux	b) Density	c) Intensity of magne	tisation. d) Magnetic flux density		
15.	The net magnetic flux	through any closed sur	face, kept in a magnetic	field is		
	(a) zero	(b) μ0/4π	(c) 4π/μ0	(d) 4μ0/π		
16.	Lenz's law of electron	nagnetic induction is as	per law of conservation	of		
	(a) energy.	(b) angular momentu	ım. (c) charge.	(d) electromotive force		
17.	Which of the following	g statements is not corr	rect?			
	(a) Whenever the amo	ount of magnetic flux lir	nked with a circuit chang	es, an emf is induced in circuit.		
	b) The induced emf lasts so long as the change in magnetic flux continues.					
	(c) The direction of inc					
	(d) Lenz's law is a cons	sequence of the law of	conservation of moment	tum.		
18.	Which of the following	g does not use the appl	ication of eddy current?			
	(a) Electric power met	ers	(b) Induction furnace			
	(c) LED lights		(d) Magnetic brakes i	n trains		
19.	The polarity of the ind	uced emf is given by				
	a) Ampere' circuital la	W	b) Biot- Savart Law			

	c) Lenz's law		d) Fleming's right-hand rule			
20.	Lenz's law is consequer	z's law is consequence of the law of conservation of				
	(a) Charge	(b) Momentum	(c) Mass	(d) Energy		
21.	A copper ring is held horizontally and a bar magnet is dropped through the ring with its length alon the axis of the ring. The acceleration of the falling magnet while it is passing through the ring is					
	(a) Equal to that due to gravity		(b) Less than that o	(b) Less than that due to gravity		
	(c) More than that due	to gravity				
	(d) Depends on the dia	meter of the ring and th	e length of the mag	net		
22.	An e.m.f. of 5 <i>volt</i> is pr	roduced by a self inducta	ance, when the curr	ent changes at a steady rate from 3		
A to 2 A in 1 millisecond. The value of self inductance is						
	(a) Zero	(b) 5 <i>H</i>	(c) 5000 <i>H</i>	(d) 5 <i>Mh</i>		
23.	3. In what direction is the magnet moving?					
s N 0000000 s						
	(a) left	(b) right	(c) up	(d) down		
24.	Which of the following is NOT an application of Lenz's Law					
	(a)Transformer	(b) AC Generator	(c) DC Motor	(d) A coil transversed by AC current		
25.	A transformer transform					
	(a)Current	(b)Voltage & current	(c)Frequency	(d)Voltage		

### SECTION B

#### This section consists of 24 multiple choice questions with overall choice to attempt any 20 questions. In case more than desirable number of questions are attempted, ONLY first 20 will be considered for evaluation.

26. An alternating e.m.f. is applied to purely capacitive circuit. The phase relation between e.m.f. and current flowing in the circuit is

(a) e.m.f. is ahead of current by  $\pi$  / 2

(b) Current is ahead of e.m.f. by  $\pi$  / 2

(c) Current lags behind e.m.f. by  $\pi$ 

- (d) Current is ahead of e.m.f. by  $\boldsymbol{\pi}$
- 27. The given figure shows the variation of V and I vs ωt for a circuit element connected to A.C mains. Name the circuit element



(a) Resistance

(b) Capacitor

(c) Inductor

28. In a series LCR Series circuit, the voltages across Inductor, capacitor and Resistances are 20V,20V,40V respectively. The phase difference between the supplied voltage and current in the circuit is

29. The graphs given below depict the dependence of two reactive impedances *X*1 and *X*2 on the frequency of the alternating e.m.f. applied individually to them. We can then say that



The electric potential is

A) Maximum at C

C) Maximum at A

#### D) Maximum at B

39. a cell of emf 5V and internal resistance 1 ohm is connected across a heating element of resistance 9 ohm, find the amount of heat lost in one sec is:

a. 2.25 Watt	b. 2.25 Joule	c. 2.5 Watt	d. 2.5 Joule

Electric energy: Whenever an electric current is passed through a conductor, it becomes hot after some time. The phenomenon of the production of heat in a resistor by the flow of an electric current through it is called heating effect of current or Joule heating. Thus, the electrical energy supplied by the source of emf is converted into heat. In a purely resistive circuit, the energy expended by the source entirely appears as heat. But if the circuit has an active element like a motor, then a part of the energy supplied by the source goes to do useful work and the rest appears as heat.

- 40. Which of the following statements is not correct?
  - a. Heat produced in a conductor depends only on its resistance
  - b. Heat produced in a conductor depends only on current passing through it
  - c. With increase in time heat produced in a conductor decreases.
  - d. All of the above
- 41. If the coil of a heater is cut to one third, what would happen to heat produced?
  - a. Tripled b. Becomes one third c. Remains same d. Becomes nine times
- 42. 60W and 100W are joined in series and connected to the mains. Which bulbs will glow brighter?a. 60Wb. 100Wc. both bulbs glow brighterd. none will glow
- 43. Distance transmission of electrical energy is to be done at
  - a. High voltages to increase the power dissipated
  - b. High voltages to decrease the power dissipated
  - c. Low voltages to decrease the power dissipated
  - d. Low voltages to increase the power dissipated

Directions for assertion & reason questions These questions consist of two statements each , printed as assertion and reason. while answering these questions you have to choose any one of the following four responses.

- (A) if both assertion& reason are true & the reason is a correct explanation of the assertion.
- (B) if both assertion& reason are true but the reason is not a correct explanation of the assertion.
- (C) if assertion is true but the reason is false.
- (D) if assertion is false but reason is true
- 44. **Assertion :** When radius of a circular loop carrying current is doubled, its magnetic moment becomes four times.

**Reason** : Magnetic moment depends on area of the loop.

- 45. Assertion: Magnetic flux linked to closed surface is zero.Reason: Direction of induced current due to change of magnetic flux is given by Faraday's Law.
- **46. Assertion:** Whenever magnetic flux linked with the coil changes with respect to time, then an emf is induced in it.

Reason: According to Lenz's law ,the direction of induced current in any coil in such a way that it always opposes the cause by which it is produced

47. **Assertion :** When capacitive reactance is smaller than the inductive reactance in *LCR* current, e.m.f. leads the current .

**Reason :** The phase angle is the angle between the alternating e.m.f. and alternating current of the circuit.

- 48. **Assertion:** The magnetic field along the axis of a thick current carrying conductor is zero **Reason:** Electric current flows only on the surface of a conductor
- 49. **Assertion:** If the frequency of alternating current in an ac circuit consisting of an inductance coil is increased then current gets decreased

Reason: The current is inversely proportional to frequency of alternating current

#### SECTION C

#### This section consists of 6 multiple choice questions with an overall choice to attempt any 5. In case more than desirable number of questions are attempted, ONLY first 5 will be considered for evaluation.

49. **Assertion:** If the frequency of alternating current in an ac circuit consisting of an inductance coil is increased then current gets decreased

Reason: The current is inversely proportional to frequency of alternating current

50 A metallic rod of length 'L' is rotated with a angular frequency of ' $\omega$ ', with one end hinged at the centre and the other end at the circumference of circular metallic ring of radius 'R', about an axis passing through the centre and perpendicular to the plane of the ring as shown in the figure. A constant and uniform magnetic field 'B' parallel to the axis is present everywhere. What is the emf between the centre and the metallic ring?



When on a magnetic core, two or more than two coils are wound, the coils are said to be mutually coupled. The current, when passed in any of the coils wound around the magnetic core, produces flux which links all the coils together and also the one in which current is passed. Hence, there will be both self-induced emf and mutual induced emf in each of the coils. The best example of the mutual inductance is the transformer, which works on the principle of Faraday's Law of Electromagnetic Induction. Faraday's law of electromagnetic induction states that " the magnitude of voltage is directly proportional to the rate of change of flux." which is explained in the topic Faraday's Law of Electromagnetic Induction.

- 51. The phenomenon due to which there is an induced current in one coil due to current in a neighbouring coil is?
  - A. Electromagnetism B.Susceptance C.Mutual inductance D.Steady current
- 52. Mutual inductance between two magnetically coupled coils depends on
  - A. Permeability of the core material B. Number of turns of the coils
  - C. Cross sectional area of their common core D. All of the above
- 53. If in an iron cored coil the iron core is removed so as to make the air cored coil, the inductance of the coil will be
  - A. More B. Less C. The same D. None of these

An alternating voltage (in volts) varies with time t (in seconds) as V = 200 sin (100  $\pi$ t) to a series combination of resistance of 10 ohm and inductor of Inductance 5 mH. Then

54. The peak value of the voltage is

	(A) 200 V	(B) 282.8 V	C) 141.45 V	(D) 100 V
55.	5. Inductive reactance in the circuit is			
	(A) 500π mΩ	(B) 500 mΩ	(C) 200π mΩ	(D) 500π Ω



### TEST PAPER DPS RANCHI

#### Time:90 Minutes

Maximum Marks: 35

#### General Instructions :

- 1. The Question Paper contains three sections.
- 2. Section A has 25 questions. Attempt any 20 questions.
- 3. Section B has 24 questions. Attempt any 20 questions.
- 4. Section C has 6 questions. Attempt any 5 questions.
- 5. All questions carry equal marks.
- 6. There is no negative marking.

### **SECTION - A**

This section consists of 25 multiple choice questions with overall choice to attempt **any 20** questions. In case more than desirable number of questions are attempted, ONLY first 20 will be considered for evaluation.

1.	Which of the following group 16 elements does not exist in -2 oxidation state?					
	(a) O	(b) S	(c)	Se	(d) Po	
2	The percentage of empty space in hcp unit cell is:					
	(a) 74%	(b) 48.6%	(c)	32%	(d) 26%	
3.	<b>3</b> With increase in temperature, which of these changes?					
	(a) Molality		(b)	Fraction of sol	lute present in water	
	(c) Weight fraction of	solute	(d)	Mole fraction		
4	The major binding force	of diamond, silicon an	d qu	artz is		
	(a) Electrostatic force		(b)	van der Waals	' force	
	(c) Covalent bond force	e	(d)	Electrical attra	action	
5.	5. Alkyl halides undergo nucleophilic bimolecular substitution involve					
	(a) retention of config	guration	(b	) racemic mixt	ture	
	(c) inversion of config	uration	(d)	formation of c	arbocation	
6.	<b>6</b> Which of the following statements is not true about glucose?					
	(a) It is an aldohexose		(b)	On heating w	ith HI it forms n-hexane.	
	(c) It is present in fura	nose form.	(d)	It does not gi	ve 2, 4-DNP test.	
7.	CH <sub>3</sub> CH <sub>2</sub> OH can be conv	erted into CH <sub>3</sub> CHO by	7			
	(a) catalytic hydrogena	tion	(b)	treatment with	LiAlH <sub>4</sub>	
	(c) treatment with pyri	dinium	(d)	treatment with	KMnO <sub>4</sub>	
8.	Which of the following i	s the wrong statement	?			
	(a) Ozone is diamagne	tic gas	(b)	O <sub>2</sub> is paramag	netic	
	(c) $O_3$ molecule is ben	t	(d)	O - O bond	lengths in ozone are unequal	
9.	The compound that react	s fastest with Lucas re	agent	at room temp	perature is	
	(a) butan 1 – ol		(b)	butan $2 - ol$		
	(c) 2-methylpropan 1-c	ol	(d)	2-methylpropa	an 2 - ol	

10.	Which one of the follow	ing is non-crystalline o	r amorphous?		
	(a) Diamond	(b) Graphite	(c) Glass	(d) Common Salt	
11.	Which of the following of	ethers is not cleaved by	HI?		
	(a) Dicyclohexyl ether		(b) Phenetol		
	(c) Di-tert-butyl ether		(d) Diphenyl ether		
12.	The system that forms m	aximum boiling azeotro	ope is:		
	(a) ethyl alcohol and v	vater	(b) benzene and tolue	ne	
	(c) acetone and chloro	form	(d) $CS_2$ and acetone		
13.	Phenol when first treated	with concentrated sulph	uric acid and then with	concentrated nitric acid,	
	gives		1// 1 1		
	(a) nitrobenzene	(b) 2,4,6-trinitropheno	ol (c) <i>o</i> -nitrophenol	(d) <i>p</i> -nitrophenol	
14.	Which of the following of	compounds does not ex	ist?		
	(a) $NCl_5$	(b) $AsF_5$	(c) $SbCl_5$	(d) $PF_5$	
15.	Which part of the nucleo	tide is responsible for	the formation of bonds	in DNA double helix?	
	(a) Base		(b) Sugar	C	
	(c) Phosphate group	CII	(d) Hydroxyl group o	f sugar	
16		,			
10,	The IUPAC name of given	n compound	15		
		Ť	NO <sub>2</sub> F		
	(a) 4-fluoro-1-methyl-3	г Snitrobenzene	$\downarrow$	NO.	
	(b) 1-fluoro-4-methyl-2-nitrobenzene				
	(c) 2-fluoro-5-methyl-1-nitrobenzene				
	(d) 4-methyl-1-fluoro-2-nitrobenzene				
1	7. Which of the following	g has the highest boiling	g point ?		
	(a) CH <sub>3</sub> F	(b) CH <sub>3</sub> Cl	(c) $CH_3Br$	(d) CH <sub>3</sub> I	
18.	XeF <sub>2</sub> is isostructural with				
	(a) $\mathrm{TeF}_4$	(b) ICl <sup>-</sup> ,	(c) SbCl <sub>3</sub>	(d) $BaCl_2$	
		-	U U	-	
19.	The solubility of a gas in	n water depends upon			
	(a) Nature of the gas		(b) Temperature		
	(c) Pressure of the gas		(d) All of the above.		
20.	Which one of the follow	wing orders is correct	for the bond dissociat	tion enthalpy of halogen	
	molecules?				
	(a) $Cl_2 > Br_2 > F_2 > I_2$	2	(b) $Br_2 > I_2 > F_2 >$	Cl <sub>2</sub>	
	(c) $F_2 > Cl_2 > Br_2 > I_2$	2	(d) $I_2 > Br_2 > Cl_2 >$	$F_2$	
21.	Each polypeptide in a pro	tein has amino acids linl	ked with each other in a	specific sequence. This	
	sequence of amino acids is said to be				
	(a) primary structure o	f proteins	(b) secondary structur	e of proteins	
	(c) tertiary structure of	proteins	(d) quaternary structu	re of proteins	
22.	Sulphur dioxide gas does	s not act as			
	(a) oxidising agent		(b) reducing agent		
	(c) dehydrating agent		(d) bleaching agent		

**23.** The reaction which involves dichlorocarbene as an electrophile is

- (a) Reimer–Tiemann reaction
- (b) Kolbe's reaction(d) Fittig's reaction

(d)  $NF_3$ 

(d) Phosphoric acid

(c)  $NI_3$ 

- (c) Friedel–Craft's acylation
- 24. Which one of the following is least basic?
  - (a)  $NCl_3$  (b)  $NBr_3$
- 25. If molality of the dilute solution is doubled, the value of molal depression constant (K<sub>f</sub>) will be
   (a) doubled
   (b) halved
   (c) tripled
   (d) unchanged

#### **SECTION - B**

This section consists of 24 multiple choice questions with overall choice to attempt **any 20** questions. In case more than desirable number of questions are attempted, ONLY first 20 will be considered for evaluation.

**26.** Which of the following statements about the composition of the vapour over an ideal 1:1 molar mixture of benzene and toluene is correct? Assume that the temperature is constant at  $25^{\circ}$ C. (Given, vapour pressure data at  $25^{\circ}$ C, benzene = 12.8 kPa, toluene = 3.85 kPa)

#### (a) The vapour will contain a higher percentage of toluene

- (b) The vapour will contain equal amounts of benzene and toluene
- (c) Not enough information is given to make a prediction
- (d) The vapour will contain a higher percentage of benzene
- **27.** Which of the following compounds can yield only one monochlorinated product upon free radical chlorination?
  - (a) 2, 2-Dimethylpropane (b) 2-Methylpropane
  - (c) 2-Methylbutane (d) n-Butane
  - **28.** The correct increasing order of ionic radii is
    - (a) Po < Se < Te < S < O (b) O < S < Se < Te < Po
    - (c) S < O < Te < Se < Po (d) none of these

**29.** RNA on hydrolysis does not yield which of the following?

- (a) Amino acid (b) Pentose sugar (c) Nitrogen base
- **30.** Which of the following alcohols will give the most stable carbocation during dehydration?
  - (a) 2-methyl-1-propanol (b) 2-methyl-2-propanol
    - (c) 1-Butanol (d) 2-Butanol
- **31.** Which of the following is used in the preparation of chlorine using HCl?
  - (a) Only  $MnO_2$  (b) Only  $KMnO_4$
  - (c) Both  $MnO_2$  and  $KMnO_4$  (d) None of these

### The density of a metal which crystallises in bcc lattice with unit cell edge length 300 pm and molar mass 50 g mol<sup>-1</sup> will be

(a) 10 g cm<sup>-3</sup> (b) 14.2 g cm<sup>-3</sup> (c) 6.15 g cm<sup>-3</sup> (d) 9.32 g cm<sup>-3</sup>

**33** The reaction of toluene with chlorine in presence of  $FeCl_3$  gives predominantly.

(a) a mixture of *o*-and *p*-chlorotoluene (b) benzyl chloride

(d) benzoyl chloride

- 34. The formation of O  $^+_2$  [PtF ] $^-_6$  is the basis for the formation of compound of xenon fluorides. This is because
  - (a) O<sub>2</sub> and Xe have comparable electro negativities
  - (b)  $O_2$  and Xe have comparable ionization energies
  - (c) both  $O_2$  and Xe are gases

(c) *m*-chlorotoluene

(d)  $O_2$  and Xe are comparable gases
35. Solution of acetone in ethanol

- (a) shows a negative deviation from Raoult's law
- (b) shows a positive deviation from Raoult's law
- (c) behaves like a near ideal solution
- (d) obeys Raoult's law
- **36.** The attachment between the base and sugar in a nucleotide is through bond. (a) hydrogen (b) peptide (c) phosphodiester (d) glycosidic
- **37.** Among the following, the correct order of acidity is
  - $HClO_{2} < HClO_{2} < HClO_{2} < HClO_{4}$ (a)  $HClO < HClO_2 < HClO_3 < HClO_4$ (b
  - (c)  $HClO_4 < HClO_2 < HClO < HClO_3$

(b) 
$$HClO_2 < HClO < HClO_3 < HClO_4$$
  
(d)  $HClO_3 < HClO_2 < HClO_2 < HClO_2$ 

- **38.** Alkali halides do not show Frenkel defect because
  - (a) cations and anions have almost equal size
  - (b) there is a large difference in size of cations and anions
  - (c) cations and anions have low coordination number
  - (d) anions cannot be accommodated in voids
- **39.** Pure nitrogen is prepared in the laboratory by heating a mixture of
  - (b)  $NH_4NO_3 + NaCl$  (c)  $NH_4Cl + NaOH$  (d)  $NH_4Cl + NaNO_2$  $NH_4OH + NaCl$
  - compound X with the molecular formula C<sub>3</sub>H<sub>8</sub>O can be oxidised to another compound Y whose molecular formulae is  $C_3H_6O_2$ . The compound X may be
    - (a) CH<sub>3</sub>CH<sub>2</sub>OCH<sub>3</sub> (b) CH<sub>3</sub>CH<sub>2</sub>CHO
  - (c) CH<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>OH (d) CH<sub>3</sub>CHOHCH<sub>3</sub>
- **41.** Butane nitrile can be prepared by heating.
  - (a) propyl alcohol with KCN (b) butyl chloride with KCN
  - (c) butyl alcohol with KCN (d) propyl chloride with KCN
- 42. Which one of the following arrangements represents the correct order of electron gain enthalpy (with negative sign) of the given atomic species?
  - (b) O < S < F < Cl (c) S < O < Cl < F (d) F < Cl < O < S(a) Cl < F < S < O
- 43. What would be the reactant and reagent used to obtain 2, 4-dimethylpentan-3-ol?
  - (a) Propanal and propyl magnesium bromide
  - (b) 3-methylbutanal and 2-methyl magnesium iodide
  - (c) 2-dimethyl propanoate and methyl magnesium iodide
  - (d) 2-methylpropanal and isopropyl magnesium iodide
- **44.** Methyl bromide reacts with AgF to give methyl fluoride and silver bromide. This reaction is called
  - (a) Fittig reaction (b) Swarts reaction (c) Wurtz reaction (d) Finkelstein reaction
- **45.** Assertion (A) : HClO is a stronger acid than HBrO. **reason** (r): Greater is the electronegativity of the halogen, greater it will attract the electron pair towards it and hence more easily the H<sup>+</sup> ion will be released.
- 46. Assertion (A): Aryl iodides can be prepared by reaction of arenes with iodine in the presence of an oxidising agent.

**reason** (**r**) : Oxidising agent oxidises  $I_2$  into HI.

**47.** Assertion (A): Larger the value of cryoscopic constant of the solvent, lesser will be the freezing point of the solution.

**reason** (r): Depression in the freezing point depends on the nature of the solvent.

- **48.** Assertion (A) : Bond angle of  $H_2S$  is smaller than  $H_2O$ . reason (r): Electronegativity of the central atom increases, bond angle decreases.
- 49. Assertion (A): Aquatic species are more comfortable in cold waters rather than in warm waters. reason (r) : Different gases have different K<sub>H</sub> values at the same temperature.

# SECTION - C

This section consists of 6 multiple choice questions with an overall choice to attempt **any 5.** In case more than desirable number of questions are attempted, ONLY first 5 will be considered for evaluation.

50. Match the items in column I with column II and choose the correct answer.

column i ( <b>Diom</b> ologulog)	adumn ii (avamnla)
column I (Biomolecules)	column ii (example)
(1) Carbohydrates	(i) Keratin
(2) Fibrous Protein	(ii) Maltose
(3) Nucleic acid	(iii) Insulin
(4) Globula Protein	(iv) DNA

Which of the following is the best matched options?

- (a) (1)–(iv), (2)–(ii), (3)–(iii), (4)–(i)
- (c) (1)–(ii), (2)–(i), (3)–(iv), (4)–(iii)
- (b) (1)–(iii), (2)–(i), (3)–(iv), (4)–(ii) (d) (1)–(ii), (2)–(iii), (3)–(iv), (4)–(i)
- **51.** Which of the following analogies is correct?
  - (a)  $N_2$ : gas::  $P_4$ :solid
  - (c)  $Bi_2O_3$ : acidic ::  $N_2O_5$ : amphoteric

(b) HNO<sub>2</sub>: stable :: HNO<sub>3</sub>:unstable
(d) ON of N in NH<sub>3</sub>: -4 :: ON of N in N<sub>2</sub>:1

(d)  $CH_3CH_2X$ 

52. Complete the following analogy

 $CH_3Br$ : Alkyl halide ::----- : allyl halide (a)  $CH_2 = CHX$  (b)  $CH_2 = CH - CH_2X$  (c)  $C_6H_5X$ 

#### case : read the passage given below and answer the following questions

Recent experimental and simulation studies on the hydration of MgO suggest that physically and chemically induced surface defects strongly promote the reaction. The result of density functional theory calculations on the stability and the structural and electronic properties of Frenkel and Schottky defects at the MgO{100} surface performed in light of the surface chemistry of MgO are presented here. Comparison of calculated formation energies shows that Frenkel and Schottky defects are more

likely to be formed at the surface than in the bulk. Frenkel adatoms were found to induce a strong local restructuring of surface atoms. The lowest energy configurations include spin-polarized and dumbbell-type reconstructions for Mg and O Frenkel adatoms. O Frenkel Vacancies were observed to trap significant amounts of electronic charge. Analysis of the electronic density of states reveals that surface Frenkel defects introduce many electronic defect states in the wide band gap of perfect MgO. These findings are



a strong indication that the defective MgO surface is not chemically inert and will more easily bind or dissociate molecules and ions.

Source: The Journal of Physical Chemistry.

- 53 MgO shows(a) Frenkel defect(b) Schottky defect
- **54.** The density of crystal changes in
  - (a) Frenkel defect (b) Schottky defect
- **55.** lonic Solids with Schottky defect contain\_
  - (a) equal number cation and anion vacancies
  - (c) cation vacancies only

- (c) Both (a) and (b) (d) None of these
- (c) Both (a) and (b) (d) None of these \_\_\_\_\_\_in their structure

(b) interstitial anions and anionic vacancies

(d) cation vacancies and interstitial cations

#### DELHI PUBLIC SCHOOL, RANCHI SAMPLE PAPER-5

CLASS: XII

### SUBJECT: BIOLOGY

1. If an endosperm cell of an angiosperm has 24 chromosomes, the root cell of megaspore mother cell should have

(a) 8

(b) 16

(c) 4

(d) 24

2. Which of the following approaches does not give the defined action of contraceptive?

(a) Hormonal contraceptives - Prevent/retard entry of sperms, prevent ovulation and fertilisation

(b) Vasectomy - Prevents spermatogenesis

(c) Barrier methods - Prevent fertilisation

(d) Intra uterine devices - Increase phagocytosis of sperms, suppress sperm motility and fertilising capacity of sperms

3. Embryo sac of an angiosperm is homologous to

(a) Megaspore

- (b) Female gametophyte
- (c) Sporangium
- (d) None of above.
- 4. After ovulation Graafian follicle regresses into
- (a) corpus atresia
- (b) corpus callosum
- (c) corpus luteum
- (d) corpus albicans

5. Which of the following disease belong to autosomal recessive mendelian disorder?

- (a) Colour blindness
- (b) Haemophilia
- (c) Sickle cell anaemia
- (d) All of the above
- 6. Milky water in green coconut is
- (a) Free nuclear Liquid endosperm
- (b)Liquid female gametophyte
- (c) Liquid nucleus
- (4) Liquid chalazal
- 7. Autogamy can occur in a chasmogamous flower if
- (a) pollen matures before maturity of ovule
- (b) ovule matures before maturity of pollen
- (c) both pollen and ovules mature simultaneously
- (d) both anther and stigma are of equal lengths.
- 8. Which one is the incorrect statement with regard to the importance of pedigree analysis?
- (a) It confirms that DNA is the carrier of genetic information.
- (b) It helps to understand whether the trait in question is dominant or recessive.
- (c) It confirms that the trait is linked to one of the autosome
- (d) It helps to trace the inheritance of a specific trait.

9. Spliceosomes are not found in cells of

(a) fungi

(b) animals

(c) bacteria

(d) plants

10. The outermost and innermost wall layers of microsporangium in an anther are respectively

(a) Endothecium and tapetum

(b) Epidermis and endodermis

(c) Epidermis and tapetum

(d) Epidermis and middle layer

11. Taylor conducted the experiments to prove semiconservative mode of chromosome replication on

(a) Vinca rosea

(b) Vicia faba

(c) Drosophila melanogaster

(d) E. coli

12. DNA dependent RNA polymerase catalyses transcription on one strand of the DNA which is called the

(a) template strand

(b) coding strand

(c) alpha strand

(d) anti strand

13. ABO blood groups in humans are controlled by the gene I. It has three alleles  $I^A$ ,  $I^B$  and i. Since there are three different alleles, six different genotypes are possible. How many phenotypes can occur?

(a) Three

(b) One

(c) Four

(d) Two

14. Identify the correct order of organisation of genetic material from largest to smallest.

(a) Genome, chromosome, gene, nucleotide

(b) Chromosome, genome, nucleotide, gene

(c) Chromosome, gene, genome, nucleotide

(d) Genome, chromosome, nucleotide, gene

15. Withdrawal of which of the following hormones is the immediate cause of menstruation?

(a) Progesterone

(b) Estrogen

(c) FSH

(d) FSHRH

16. If a heterozygous yellow seeded pea plant is crossed with a green seeded pea plant, what ratio of yellow and green seeded plants would you expect in F 1 generation?

(a) 9:1

(b) 1 : 3

(c) 3 : 1

(d) 50 : 50.

17. Removal of RNA polymerase III from nucleoplasm will affect the synthesis of

(a) tRNA

(b) hnRNA

(c) mRNA

(d) rRNA

18. Select the correct statement from the ones given below with respect to dihybrid cross.

(a) Tightly linked genes on the same chromosomes show higher recombination.

(b) Genes far apart on the same chromosome show very few recombination.

(c) Genes loosely linked on the same chromosome show similar recombination.

(d) Tightly linked genes on the same chromosome show very few recombination.

19. Select the two correct statements out of the four (i -iv) statements given below about lac operon.

(i) Glucose or galactose may bind with the repressor and inactivate it.

(ii) In the absence of lactose the repressor binds with the operator region.

(iii) The z gene codes for permease.

(iv) This was elucidated by Francois Jacob and Jacques Monod.

The correct statements are

(a) (ii) and (iii)

(b) (i) and (iii)

(c) (ii) and (iv)

(d) (i) and (ii)

20. Which one of the following conditions correctly describes the manner of determining the sex?

(a) Homozygous sex chromosomes (ZZ) determine female sex in birds.

(b) XO type of sex chromosomes determine male sex in grasshopper.

(c) XO condition in humans as found in Turner's syndrome, determines female sex.

(d) Homozygous sex chromosomes (XX) produce male in Drosophila.

21. Which one of the following pairs of nitrogenous bases of nucleic acids, is wrongly

matched with the category mentioned against it?

(a) Guanine, Adenine Purines

(b) Adenine, Thymine Purines

(c) Thymine, Uracil Pyrimidines

(d) Uracil, Cytosine Pyrimidines

22. If a colour blind man marries a woman who is homozygous for normal colour vision, the probability of their son being colour blind is

(a) 0

(b) 0.5

(c) 0.75

(d) 1

23. Fertilisation in humans is practically feasible only if

(a) the ovum and sperms are transported simultaneously to ampullary-isthmic junction of the cervix

(b) the sperms are transported into cervix within 48 hrs of release of ovum in uterus

(c) the sperms are transported into vagina just after the release of ovum in Fallopian tube

(d) the ovum and sperms are transported simultaneously to ampullary–isthmic junction of the Fallopian tube.

24. *Escherichia coli* fully labelled with 15 N is allowed to grow in 14 N medium. The two strands of DNA molecule of the first generation bacteria have

(a) different density and do not resemble parent DNA

(b) different density but resemble parent DNA

(c) same density and resemble parent DNA

(d) same density but do not resemble parent DNA.

25. Assertion: Production of FSH increases, while that of LH decreases in the ovulation phase.

Reason: Due to decrease in the level of LH, ovulation (releasing of ova) takes place.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If both Assertion and Reason are false.

26. Assertion: The progeny in F2-generation traits were identical to their parental type. Reason: The progeny shows no blending of traits.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If both Assertion and Reason are false.

27. Assertion: Rapid decline in death rate, MMR and IMR have led to a staggering rise in population.

Reason: Such an alarming growth rate has led to an absolute scarcity of even the most basic requirements, i.e. food and shelter.

(a) If both Assertion and Reason are true and Reason is the correct explanation of Assertion.

(b) If both Assertion and Reason are true but Reason is not the correct explanation of Assertion.

(c) If Assertion is true but Reason is false.

(d) If both Assertion and Reason are false.

# Read the following and answer any three questions given below:

Human male reproductive system comprises of a pair of testes, primary sex organs associated with formation of gametes and production of sex hormone. Study the given figure of human male reproductive system and answer the following questions.



28. Which of the following is correct for labelled part P?(a) P is rete testis which transports sperms to outside.

(b) P is epididymis which secretes fluid that nourish the sperms

(c) P is epididymis that carry sperms and secretion of seminal vesicles

(d) P is rete testis which lies along inner side of each testis and stores the sperms

29. Identify the correctly matched pair.

(a) Q - Vasa efferentia

(b) R - Ejaculatory duct

(c) S - Seminal vesicle

(d) T - Cowper's gland

30. Which structure passes through the prostate gland and carries sperms and secretion of seminal vesicle?

(a) P

(b) T

(c) S

(d) R



Delhi Public School, SAIL Township, Ranchi

**Practice Paper - V** 

Class: XII (Session: 2021-22)

Computer Science (Code 083) (Theory: Term-1)

Maximum Marks: 35

**Time Allowed: 90 Minutes** 

**General Instructions:** 

- 1. This question paper contains 3 (A, B and C) sections.
- 2. Section A, consists of 25 Questions (1-25). Attempt any 20 questions
- 3. Section B, consists of 24 Questions (26-49). Attempt any 20 questions
- 4. Section C, consists of 6 case study based Questions (50-55). Attempt any 5 questions
- 5. All questions carry equal marks

Qn.No	Section - A
	This section consists of 25 Questions( 1 to 25) . Attempt any 20 Questions from this section. Choose the best possible options
1	<ul> <li>Find the valid keyword from the following:</li> <li>a. Float</li> <li>b. breaks</li> <li>c. True</li> <li>d. false</li> </ul>
2	Consider the following code and answer the questions that follow: dict2 = { 'CS': 90, 'Phy':92, 'Chem':95, 'Eng':93}
	Ashwin needs to update the dictionary dict2. He has written the following command:
	dict2.update({'CS':95,'Eng':94})
	<ul> <li>What will the above code do?</li> <li>(a) It will throw an error as dictionary cannot be updated</li> <li>(b) it will not throw any error, but it will not do any changes in dict2</li> <li>(c) It will create a new dictionary as dict2=({ 'CS':95, 'Eng':94}</li> <li>(d) It will simply update the dictionary as: dict2={ 'CS': 95, 'Phy':92, 'Chem':95, 'Eng':94}</li> </ul>
3	Predict the output: d2={'Rekha': 27 ,'Sharma':22,'Hridesh':25,'Shubham':23} for x in sorted(d2.values()):

	(b) 27 25 23 22
	(c) 23 25 22 27
	(d) 22 23 25 27
4	Identify the correct statement:
	a) write() writes a tuple in file
	b) write() writes a string in a file
	c) writelines() writes a string in file
	d) writelines() writes a tuple in a file
5	Which of the following commands is used to open the file "marks.txt" for writing only
	in text format
	(a) fileout= open("marks.txt",'w')
	(b) fileout= open("marks.dat",'ab')
	(c) fileout= open("marks.DAT",'wb+')
	(d) fileout=open('stud.txt,'wb')
6	Consider that the position of the file pointer is at the beginning of the 5 <sup>th</sup> line in the text
	file "story.txt" stored in f2 file object:
	Choose the right option can be used to read all the remaining lines.
	(a) f2.reads()
	(b) story.reads()
	(c) story.readlines()
	(d) f2.readlines()
7	
	Ishitha is learning to work with binary files and text files.
	Her teacher has given the following function with some wrong code, which is creating
	a text file named as "dramas.txt" and then opens, displays the entire contents in capital
	letters .
	Identify the correct option/s from the following to open the file in read mode:
	i. fob =open('Dramas.txt','w')
	ii. fob=open('dramas.txt','r')
	iii. fob=open('dramas.dat', 'w')
	iv. fob=open(drama.dat', 'r+')

	(a) Only ii
	(b) Both (i) and (iii)
	(c) (i) (ii) and (iii)
	(d) (i) only
8	
	Consider the following program snippet:
	def power(m,n): #1
	y=m**n #2
	return y #3
	def calc(val): #4
	a=power(val,2) #5
	return a #6
	num=5 #7
	answer=calc(num)+power(3,3) #8
	print(answer) #9
	Predict the flow of execution
	(a) 1->4->7->8->5->2->3->6->2->3->9
	(b) 1->4->8->7->5->2->6->3->2->3->9
	(c) 7->8->4->5->6->3->2->1->3->-4->9
	(d) None of these
9	Which of the following list of operators has highest precedence?
	+,//,%,<<,>>,**, ,-
	(a) %
	(b) //
	(c) **
	(d) <<,>>
10	Consider two lists:
	L1=['Python','is','easy']
	L2=['Python',['is','open'],'soource']
	Which of the following expression will cause an error?
	(a) L1==L2

	(b) L2.pop()
	(c) L2.append('welcome')
	(d) L2[1].upper()
11	
	Which of the following statement is correct in the case of text files:
	(a) To open a file in text format, add 'b' to the mode parameter.
	(b) The 'wb' mode opens the file in text format for writing
	(c) In text files, each line of text is terminated with a EOL which is the new line
	character ('\n') in python by default.
	(d) When text files are opened using any text editor, the data is unrecognizable.
12	
	What is the importance of flush()
	(a) Returns whether the file allows us to change the file position
	(b) Returns whether the file stream can be read or not
	(c) Clears the internal buffer
	(d) Resizes the file to a specified size
13	
	Identify the correct statement:
	(a) The load() method of Python pickle module reads the pickled byte stream of one
	or more python objects from a file object.
	(b) The dump() method of Python pickle module reads the pickled byte stream of
	one or more python objects from a file object.
	(c) The pickle module will not keeps track of the objects it has already serialized.
	(d) To de-serialize a data stream, you call the dump() function.
14	Consider the program snippet :
	F1 = open("books.txt", "rb")
	$E_{1} \operatorname{cost}(10, 2)$
	F1.seek(-10, 2)
	print(F1 tell())
	F1 close()
	What will be the output of the above program?
	(a) Unpredictable

	(b) 12
	(c)2
	(d) -8
15	
	$\mathbf{x} = 50$
	def func(x):
	print(x)
	x = 2
	func(x)
	print(x)
	What will be the value of x after executing the function?
	(a) $50.2$
	(a) $50,2$ (b) $50,50$
	(c) $2.50$
	(d) 2.2
16	
	Choose the incorrect statement:
	(a) Having a positional arguments after keyword arguments will result into error
	(b) An argument list must contain keyword arguments followed by positional
	arguments
	(c) Keyword arguments should be taken from the required arguments preferably
	(d) Combination of multiple arguments in a function call will not create error
17	Go through the given function headers. Choose which of the option will cause the error?
	(a) def display( $x,y=1$ ):
	(b) def display $(x=1,y=2)$ :
	(c) def display( $x=1, y=3, z=3$ );
	(d) def display $(x=1,y=2,z=3,a)$ ;
18	
	Select the function that allows to write a single record into each row in CSV file.
	(a) write()
	(b) writerows()

	(c) writerec()
	(d) writerow()
10	
17	Raishankar, a student of class 12th, is learning CSV File Module in Python. During
	examination, he has been assigned to create a CSV File and store some items using
	'Item.csv'. Help him to open the file which creates the desired CSV File.
	CSV File:
	Rollno, Name, Marks
	1001,Nirmal ,90.0
	1003,Jaya,95.0
	1004,Roshan,81.0
	1007,Sadaf,88
	Choose the right statement to open the file:
	(a) "item csy" "r"
	(d) "item.dat", "w"
	(c) "item.csv","w"
	(d) "items.csv","w"
20	Identify the connect statements
	(a) CSV files should not open with new line argument to suppress EQL translation
	(a) CSV files should be opened with new line argument to suppress EOL translation (b) CSV files should be opened with new line argument to suppress EOL translation
	(c) CSV files stores the information in ASCII or Unicode characters
	(d) The absolue paths are from the topmost level of the directory structure
21	
	What is the difference between r+ and w+ file modes?
	(a) In w+ mode, the pointer is initially placed at the end of the file , in r+ the file
	pointer is placed at the beginning of the file
	(b) In w+ mode, the pointer is initially placed at the beginning of the file , in r+ the
	file pointer is placed at the end of the file
	(c) It depends upon the Platform
	(d) No difference

22	
	Evaluate the expression given below :
	X=20
	Y=25
	X % Y // X
	(a) 1
	(b) 1.0
	(c) 0.0
	(d) 2.0
23	
	Select the right command to read each record for the binary file object f1 from
	"movies.dat"?
	(a) f1= open("movies.dat",'rb')
	(b) pickle.loads(f1)
	(c) pickle.dump(f1)
	(d) pickle.load(f1)
24	
	Which value types does input() returns?
	(a) double
	(b) float
	(c) boolean
	(d) string
25	
	Name the method that removes all items from the dictionary and the dictionary becomes
	empty?
	(a) clear()
	(b) pop()
	(c) delete()
	(d) truncate()

	Section – B
	This Section consists of 24 Questions(26 to 49). Attempt any 20 questions.
26	
	Predict the output of the following Python snippet:
	data={ 'Name ' 'Karthik ' 'age' · 25 }
	x=data.copy()
	print(id(x) == id(data))
	a) 1
	b) 0
	c) Irue d) Felee
	d) raise
27	
	The file "quotes.txt" contains the following:
	"I think if it is true that there
	are as many minds as there are heads then
	there are as many kinds of love as there are hearts."
	Considering the given file, What output will be produced by the following code:
	ob-open("quote tyt" 'r')
	11=ob readline()
	12=ob.readline()
	13=ob.read(5)
	print(13)
	ob.close()
	(2) 5
	(a) $\mathcal{G}$ (b) then
	(c) i thin
	(d) there
28	

	Identify the output of the following:
	t1 = (10, 13, 14, 20, 34, 46, 54)
	t1[::3]
	a) 10,20,54
	b) (10,20,54)
	c) [10,14,34]
	d) (10,14,34)
29	
	Predict the output:
	1
	x=11
	v=5
	for i in range(x-y * 2):
	print(i)
	(a) 0
	(b) 1
	(c) 0 1
	(d) 0 1 2 3 4 5
30	Identify the output of the following Python snippet:
20	count=1
	while(count<5):
	print("Python")
	count + = 3
	countr-5
	(a) Python
	(b) Python Python
	(c) Python
	Python
	(d) Python Python Python Python
31	
51	Predict the Output:
	11-[30, 40, 50, 60, 70]
	$11 = 10, \pm 0, 50, 00, 70$
	$\frac{11.append([100,200])}{11.insert(1000,2000)}$
	11.11501(1000,2000)
	(a) [100 200]

	(b) [[100,200,1000,2000]
	(c) [100]
	(d) [200]
32	
	Rohith, a student of class 12th, is learning binary file handling in Python. During
	examination, he has been assigned an incomplete python code to create a binary file
	"records.dat" (content shown below). Help him to identify the missing code in
	statement 1.
	import pickle
	$Str = \frac{1}{2}$
	str=#statement 1
	$SU = \dots \qquad \#Statement 1$
	nrint(11[1]
	(a) pickle.dump()
	(b) pickle.dump(f1)
	(c) pickle.load(str)
	(d) pickle.load(f1)
	What will be stored in the file "employee.csv" after the following code is executed?
33	
	details= [' Chennai', 'Teacher',6000]
	import csv
	f1=open("employee.csv", 'w')
	writer=csv.writer(f1,delimiter='')
	writer.writerow(['Area', 'Name', 'Salary'])
	writer.writerows(details)
	(a) ' Chennai' 'Teacher' 6000
	(a) Chemiai , reacher ,0000 (b) ['Area' 'Name' 'Salary']
	(b) [ $\Delta$ (c) [ ['Area', Name', Salary'] ]
	(c) [['fica, ivane', Salary']] (d) 'Area' 'Name' 'Salary'
	'Chennai'. 'Teacher' 6000

34	What will be the output of the following code: def my_func(): x = 10 print(x) x = 20 my_func() print(x)
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
35	print([8.00/(2.0+2.0),4.00/2.0+2.0,6.00/2.0/2.0]) Evaluate the above expression and predict the output: (a) [1.0, 4.0, 1.5] (b) [2.0, 4.0, 1.5] (c) [2, 4, 1] (d) [4.0, 1.0, 1.5]
36	Predict the output: def sum(x, y): return x + y total=sum(10, sum(5, 10)) print(total)
	<ul> <li>(a) 25</li> <li>(b) 10</li> <li>(c) 5</li> <li>(d) 15</li> </ul>

37	
57	Consider the program code and answer the following:
	<pre>import random str="CBSEONLINE" num=random.randint(0,3) n=9 while str[n] != 'L':     print(str[n]+str[num]+'\$',end=")     num=num+1     n=n-1</pre>
	What are the possible outcomes executed from the following code?(1) NS\$IE\$LO(2) EC\$NB\$IS\$(3) EE\$NO\$IN\$(4) LE\$NO\$ON\$
	<ul> <li>(a) (2) and (3) only</li> <li>(b) (1),(2),(3)</li> <li>(c) (4) only</li> <li>(d) None of these</li> </ul>
38	Choose the possible output of the following Python code:
	<pre>import random l1=["apple","orange","banana","grapes"] for i in range(3):     j=random.randint(1,2)     print(l1[j],end='#')</pre>
	<ul> <li>(a) banana#banana#orange</li> <li>(b) orange#orange#orange#</li> <li>(c) grapes#grapes#orange</li> <li>(d) grapes#orange#banana#</li> </ul>
39	What will be the output of the following Python function:
	def display(str): val=""

	l=range(len(str)-1)
	for i in l:
	if(str[i] = str[i+1]):
	val+=val[i].lower()
	else:
	val+=str[i]
	return val
	print(display("AdAmaNtine"))
	(a) adamantin
	(b) ADAMANTINE
	(c) AdAmaNtine
	(d) AdAmaNtin
40	
	Consider the file points.txt contains the following contents:
	"There have been tyrants and murderers and for a time they seem invincibles, but in the end, they always fall think of it, alwaysBy Gandhiji"
	What will be the output of the following code?
	def displaywords():
	count=0
	f1=open("points.txt",'r')
	11=f1.read()
	w1=l1.split()
	for x in w1:
	if(len(x)>9):
	print(x)
	f1.close()
	displaywords()
	(a) invisibles
	(b) fall
	(c) tyrants
	(d) invincibles

41	
41	Consider the file "notes.txt" contains the following data:
	"Education is the manifestation of perfection"
	What will be the output of the following:
	f3=open("notes.txt")
	x=r3.readline()
	print(x.title())
	f3.close()
	(a) Education is the manifestation of perfection
	(b) Education Is The Manifestation Of Perfection
	(c) Perfection
	(d) perfection
42	Predict the output:
	1
	ans="CBSE Exam 2021"
	str=""
	for i in range(len(ans)):
	if(ans[i].islower()):
	<pre>str=str+ans[i].upper()</pre>
	elif(ans[i].isupper()):
	str=str+ans[i].lower()
	elif(ans[i].isdigit()) :
	str=str+ans[i]
	else:
	str=str+"#"
	print(str)
	(a) CBSE##Exam##2021
	(b) CBSE Exam 2021

	(c) cbse#eXAM#2021
	(d) CBSE#eXAM#2021
43	Consider content in the file "works.txt"
	"Research an attitude of inquiry or It is the frame of mind or it is the sense of development"
	What will be the output of the following code?
	f4=open("works.txt",'r')
	a=f4.readline()
	b=a.count('or',15)
	print(b)
	f4.close()
	(a) 1
	(b) 3
	(c) 2
	(d) 0
44	Identify the local names from the following Python code:
	aim="Data Analysis"
	position=100
	level=0
	def search():
	max=level+5
	print(len(aim)==0)
	return max
	result
	(a) aim
	(b) position
	(c) result
	(d) max

45	
	Consider the file "statements.txt":
	It contains the following data:
	"Observation should be specific and systematic"
	f5=open("statements.txt",'r')
	t1=tuple('and')
	count=0
	m=f5.read()
	for x in m:
	if(x in t1):
	count+=1
	print(count)
	f5.close()
	(a) 5
	(b) 7
	(c) 2
	(d) 0
46	
	By population we mean the aggregate or totality of objects\n
	or individuals regarding which inferences are to be made in a sampling study.\n
	The standard error of any statistic is the standard\n
	deviation of its sampling distribution by 100 books.com
	Consider the above lines in the file "rec.txt"
	What will be the output of the following code??
	fh=open("rec.txt",'r')
	count=0
	d1=fh.readlines()
	count=0
	for x in d1:
	if(x[0]!='p'):
	count+=1
	print(count)
	fh.close()

	$(\cdot)$ 2
	(b) 1
	(c) 2
	(d) 0
47	
-	import sys
	f1_opport 555
	11=f1.readline()
	# statement 1
	f1.close()
	Identify the missing statement from the following:
	(a) sys stdin write(11)
	(a) system. where $(1)$
	(b) sys.stan.read(11)
	(c) sys.stdout.write(11)
	(d) sys.stdout.write(f1)
48	
	Pick out a relevant statement to write data to the file to fill the statement 1:
	import picklo
	data=['python' 100 [20 25 30] 200]
	data=['python',100,[20,25,30],200] with open('docs dat' 'wb') as f1:
	data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1
	$data=['python',100,[20,25,30],200]$ with open('docs.dat','wb') as f1: $f(x) = \frac{1}{2} = 0$
	data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1 f1.close()
	data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1 f1.close()
	data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1 f1.close() (a) pickle.load(f1)
	data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1:
	<pre>import pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1:    # statement 1 f1.close()     (a) pickle.load(f1)     (b) pickle.load(data,f1)     (c) pickle.dump(f1,data)</pre>
	data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1:
	<pre>import pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1:    # statement 1 f1.close()     (a) pickle.load(f1)     (b) pickle.load(data,f1)     (c) pickle.dump(f1,data)     (d) pickle.dump(data,f1)</pre>
49	<pre>import pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1:# statement 1 f1.close() (a) pickle.load(f1) (b) pickle.load(data,f1) (c) pickle.dump(f1,data) (d) pickle.dump(data,f1)</pre>
49	hiport pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1 f1.close() (a) pickle.load(f1) (b) pickle.load(data,f1) (c) pickle.dump(f1,data) (d) pickle.dump(data,f1) Predict the output:
49	Import pickle         data=['python',100,[20,25,30],200]         with open('docs.dat','wb') as f1:        # statement 1         f1.close()         (a) pickle.load(f1)         (b) pickle.load(data,f1)         (c) pickle.dump(f1,data)         (d) pickle.dump(data,f1)
49	<pre>import pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1:# statement 1 f1.close() (a) pickle.load(f1) (b) pickle.load(data,f1) (c) pickle.load(data,f1) (d) pickle.dump(f1,data) (d) pickle.dump(data,f1)  Predict the output: d1={'name':'Sharmila','age':23,'salary':30000} </pre>
49	httport pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1 f1.close() (a) pickle.load(f1) (b) pickle.load(data,f1) (c) pickle.load(data,f1) (c) pickle.dump(f1,data) (d) pickle.dump(data,f1) Predict the output: d1={'name':'Sharmila','age':23,'salary':30000} d1.pop('salary')
49	httport pickle data=['python',100,[20,25,30],200] with open('docs.dat','wb') as f1: # statement 1 f1.close() (a) pickle.load(f1) (b) pickle.load(data,f1) (c) pickle.dump(f1,data) (d) pickle.dump(data,f1) Predict the output: d1={'name':'Sharmila','age':23,'salary':30000} d1.pop('salary') d1.pop('salary',''Error'')

(a) Error
(b) Key Error
(c) 30000
(d) salary

	Section C
	Case Study Based Questions
	This Section Consists of 6 questions( 50-55). Attempt any 5 questions
	Arjun, a student of class 12th, is learning CSV File Module in Python. During examination, he has been assigned an incomplete python code (shown below) to create a CSV File 'item.csv' (content shown below). Help him in completing the code which creates the desired CSV File.
	CSV File:
	Item_code, Description,Price 101,Eraser,10.0 103,Pencil,15.0 104,Ruler,18.0 107,Note_Book,50
	Incomplete Code :
	import       #Statement-1         f1= open(,)       #Statement-2
	iwriter= # Statement -3 ans='y'
	<pre>itemrec= [] #Statement-4 print("enter item details") while ans=='y':</pre>
	icode=input("enter item code") desc=input("enter description") price=float(input("enter price")) 
	ans=input("want to enter more items??(y/n ") else:
	#Statement 6 print("records written successfully")
	f1.close()
50	Identify the suitable code for blank space in line marked as Statement-1 (a) csv file

	(b) CSV
	(c) csv
	(d) Csv.*
51	
	Choose the missing code for blank space in line marked as Statement-2
	(a) "item csy" "r"
	(b) "items.dat"."w"
	(c) "items.csv", "w"
	(d) "item.csv", "w"
52	
	Identify the suitable code for blank space in line marked as Statement-3
	(a) iwriter=csv.writer(f1)
	(b) iwriter=csv.writes(f1)
	(c) iwriter=csv.writerec(f1)
	(d) iwriter=csv.writerow(f1)
53	
	Select the values in the list that should be used in the blank space of line marked as
	Statement-4
	(a) [item,desc,price]
	(b) ['item','desc','price']
	(c) ['Item_code','Description','Price']
	(d) [icode,desc,price]
54	
	Identify the suitable code for blank space in line marked as Statement-5
	(a) itemrec.append([icode,desc,price])
	(b) itemrec.insert([icode,desc,price])
	(c) itemrec.writer ([icode,desc,price])
	(d) itemrec.writerow([icode,desc,price])
55	Identify the suitable code for blank space in line marked as Statement 6
	identity the suitable code for blank space in file marked as Statement-0
	(a) iwriter .writerows()

(b) iwriter .writes(itemrec)
(c) iwriter .writerec(itemrec)
(d) iwriter .writerows(itemrec)

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	DELHI PUBLIC SCHOOL, RANCHI FINE ART (Painting / Graphics) SAMPLE PAPER (SET-5) 2021-22	
	Class – XII TERM-5	
	Time allowed: 01 hours Maximum Marks: 15	
∎ Max	k. Time Allowed: 60 Minutes (1Hrs.) ■ Marks: 15	
Gene	ral Instructions:-	
► The	e Question Paper contains three sections: A, B and C.	
► Sec	ction A has 12 questions. Attempt any 10 questions.	
	ction D has 12 questions. Attempt any 10 questions.	
	questions carry equal marks.	
► The	ere is no negative marking.	
SECT	ION A- KNOWLEDGE / UNDERSTANDING (ATTEMPT ANY	10)
1	On which two religions were manuscripts of Pala school and Western school	0.6
	based?	
	(a) Hinduism and Christianity	
	(D) Buddnism and Jainism	
	(c) Finduisin and Buddhisin (d) Jainism and Islam	
2	"Pitambar" refers to which colour?	0.6
-	(a) Red	0.0
	(b) Green	
	(c) Yellow	
	(d) Blue	
3	Who painted Bani-Thani?	0.6
	(a) Nihal Chand	
	(b) Nuruddin	
	(C)Nainsuk (d) Miskin	
4	Who coined the term 'Rainut Paintings' to refer to the Raiasthani miniatures	0.6
-	(a) Ananda Coomaraswamy	
	(b) Jagat Singh	
	c)Bhao Singh	
	(d) B.N.Goswamy	
5	Mughal artists had achieved mastery in creating crowded compositions.	0.6
	(a) Krishna Lifting Mount Govardhan	
	(b) Kabir and Raidas	
	(c) Falcon on a Bird rest	
6	(u) Janangir's Dream Name the technique used after colouring in which a stone is rubbed at the back of	0.6
U	the painting?	0.0
	(a) Khadiya	
	(b) Wasli	
	c) Bunishing	
	(d) Mounting	
7	In which medium are the Rajasthani miniature paintings made	0.6
	(a) Oil colours	

	(b) Pastel colours	
	(c) Water colours	
	(d) Acrylic colours	
8	'Paintings of Hampi and Lepakshi were major influences on miniature paintings of the Deccan region'.	0.6
	(a) Frue	
0	(D) Faise The style of manuscript illustration was vigorously distorted	0.6
9	(a) Jain	0.0
	(a)san (b)Pala	
	(c) Central	
	(d) Fastern	
10	What is Wasli ?	0.6
	(a) Glue used in colour pigments	
	(b) Lavered thin sheets of handmade papers	
	(c) Colour pigments	
	(d)Stones	
11	The depiction of nature is simply ornamental in Rajasthani miniatures.	0.6
	(a) Maru-Ragini - Mewar	
	(b) Chaugan Players- Jodhpur	
	(c) Krishrta on Swing- Bikaner	
	(d)Radha (Bani-Thani) – Kishangarh	
12	Which of the following is not a characteristic feature of Pahari school?	0.6
	(a) Women have been shown with round face, backward sloping forehead with	
	nose falling in the same line	
	(b) Artists used green beetle wings in ornamens	
	(c) Calligraphy was done on golden borders	
	(d) High horizon is commonly seen with just an inch long strip of the sky in the	
	upper part	
	SECTION B-	
	APPLICATION BASED (ANALYTIC & CALCULATIVE)	
	(ATTEMPT ANY 10)	
12	Who among the following is one of the most significant scholars of the Bahari	0.6
15	schools of Painting?	0.0
	(a) B N Goswamy	
	(b) Vidva Deheija	
	(c) C. Sivaramamurti	
	(d) Neville Tuli	
14	The artist ateliers/workshops gradually, spread from to other hill states,	0.6
	such as Chamba and Kullu.	
	(a) Kangra	
	(b) Guler	
	(c) Basohli	
	(d) Mankot	
15	"The Kangra style is by far the most poetic and lyrical of Indian miniature styles."	0.6
	Spot the one that does NOT support the statement?	
	(a) Short and stout female figure with receding forehead	
	(b) Delicacy of line	
	(c) Brilliance of colour	
	(a) Minuteness of decorative details	0.0
16	what was the main factor that became the reason for the assimilation/influence of	0.6
	wuynai art on Panari art according to the scholars?	
	(a) Sucuen myration or wuynar artists (b) Naturalism in Mughal art appealed to the Debari artists	
1	(v)   valuration in mughat at appealed to the Fahari difficion	1

	(c) Pahari region came under the Mughal empire and therefore workshops/ateliers	
	too	
	(d) The artists were instructed by their patrons to follow the Mughal style.	
17	Who employed Aqa Riza, a well-known Iranian/Persian painter and Hussain Abul	0.6
	Hasan?	
	(a) Akbar	
	(b) Aurangzeb	
	(c) Jahangir	
	(d) Humayun	
18	What is Hamza Nama?	0.6
	(a) The translated and illustrated version of the Ramavana	
	(b) An illustrated account of the heroic deeds of Hamza, the uncle of Prophet	
	Muhammad	
	(c) The translated and illustrated version of the Mahabharata	
	(d) An illustrated account of the life and teachings of Prophet Muhammad	
19	Under whose reign/patronage was Padshahnama (The Chronicles of the King)	0.6
	undertaken ?	
	(a) Akbar	
	(b) Humayun	
	(c) Shah Jahan	
	(d) Babar	
20	Which European artist made studies of Indian drawings of Mughal court painting	0.6
	to master the delicate lines?	
	(a) Renoir	
	(b) Rubens	
	(c) Raphael	
	(d) Rembrandt	
21	The Mughal school paintings depict the royal glory, discipline and glory of the	0.6
	Mughal rulers.	
	(a) Krishna Lifting Mount Govardhana	
	(b) Kabir and Raidas	
	(c) Falcon on a Bird rest	
	(d) Marriage Procession of Dara Shikoh	
22	"Mughal art was a highly sophisticated blend of the Islamic. Hindu and European	0.6
	visual culture and aesthetics." Which of the following assert the statement	
	further?	
	(i) Mughal rulers employed European artists in their ateliers.	
	(ii) Depiction of foreign and religious stories especially Islamic and Indian epics	
	(iii) Rulers told the artists to refer to foreign (European) paintings that came as	
	aifts.	
	(iv) Workshops had Hindu artists working under the guidance of Mughal artists	
	(a) (i), (ii), (iii)	
	(b) (i), (iii), (iv)	
	(c) (ii), (iii), (iv)	
	(d) (i), (ii), (iv)	
23	This painting is one of the illustrations from Harivamsa- the genealogy of Hari	0.6
	(Krishna).	
	(a) Krishna Lifting Mount Govardhana	
	(b) Kabir and Raidas	
	(c) Falcon on a Bird rest	
	(d) Marriage Procession of Dara Shikoh	

24	Shah Jahan is portrayed with a greenish colored nimbus, to certify his high	0.6
	status in the whole gathering.	
	(a) Krishna Lifting Mount Govardhan	
	(b) Kabir and Raidas	
	(c) Falcon on a Bird rest	
	(d) Marriage Procession of Dara Shikoh	
SEC	ION C- HIGHER ORDER SKILLS(ATTEMPT ANY 5)	
25	Which of the following DID NOT influence Deccan art?	0.6
	(a) Lepakshi frescoes and Hampi	
	(b) Persian influence	
	(c) Ottoman Turkish	
	(d) Pahari art	
26	Refer to the painting from your book: Chaughan Players from RAJASTHANI SCHO	
	and answer the following questions.	
	Choose the correct option:	
	Assertion (A): The two horses at the back are larger than the ones in the	0.6
	foreground	0.0
	Reason (R): The artist did this to give dominance to the princesses royal ladies	
	Reason (R). The artist did this to give dominance to the princesses royal ladies.	
	(a) Both A and R are correct and R is the correct explanation of A.	
	(b) Both A and R are correct but R is not the correct explanation of A.	
	(c)A is incorrect but R is correct.	
	(d) R is incorrect but A is correct	
	•	
27	Refer to the painting-"Krishna with Gopis" from PAHARI SCHOOL from your	0.6
	books and answer the following questions.	
	Choose the correct option	
	The earliest bold style spread to Guler, Kangra and the rest of the Pahari	
	regions.	
	(a) Mughal	
	(b) Basohli	
	(c) Chamba	
	(d) Mankot	
28	Assertion (A) : Mughal art was a blend of Persian and indigenous Hindu art.	0.6
	Reason (R) : Birds and animals were painted with scientific correctness under	
	Indian influence.	
	(a) Both A and R is correct and R is the correct explanation of A.	
	(b) Both A and R is correct but R is not the correct explanation A.	
	(c) A is incorrect but R is correct.	
	(d) R is incorrect but A is correct.	
29	Why was the art of the Mughal court considered secular and eclectic?	0.6
	(a) They did research on Indian art history	
	(b) The artists of Mughal courts used doth Muslim and Hindu names	
	(c) They translated and illustrated Indian texts and assimilated the indigenous	
	Indian art style	
	(d) They invited artists of regional schools into their workshops to train their	
	artists	
30	Identity the paintings from the following statement and choose the correct option:	0.6
	There is no line of herizon or a same of nereneative if we compare Chaugher	
	nere is no line of nonzon of a sense of perspective if we compare chaughan players of lodbour with the painting of parallel school of Dessen area on a similar	
	players of Jouriput with the painting of paraller school of Deccall area of a Similar subject where	
	we see a better nortraval of denth and perspective	
	we see a veller portrayal of deplitation perspective.	<u> </u>

<ul> <li>(i) The faces of riders in both the paintings are in profile i.e. Ek-chashma.</li> <li>(ii) The reverse movement of the riders on their horses in the foreground lends both the paintings a dynamic movement.</li> </ul>
(a) Only (i)is correct
(b) Only (II) is correct
(c) Both (i) and (ii) are correct
(d) Neither (i) nor (ii) is correct

# **SAMPLE QUESTION PAPER 5**

# CLASS 12

# ACCOUNTANCY

#### **Time Allowed: 90 Minutes**

#### Maximum Marks: 40

#### **General Instructions:**

Read the following instructions very carefully and strictly follow them:

- **1.** This question paper comprises three **PARTS I, and II**. There are 55 questions in the question paper.
- **2. Part I** -is compulsory for all candidates.
- **3. Part II** Analysis of Financial Statement
- **4.** There is an internal choice provided in each Sections.
  - I. **Part-I**, contains three Sections -A, B and C. **Section A** has questions from 1 to 18 and **Section B** has questions from 19 to 36, you have to attempt any 15 questions each in both the sections.
  - II. **Part I, Section C** has questions from 37 to 41. You have to attempt any four questions.
  - III. Part II, contains two Sections A and B. Section A has questions from 42 to 48, you have to attempt any five questions and Section B has questions from 49 to 55, you have to attempt any six questions.
- 5. All questions carry equal marks. There is no negative marking.
- **6.** Specific Instructions related to each Part and subdivisions (Section) is mentioned clearly before the questions. Candidates should read them thoroughly and attempt accordingly.
## <u> Part – I</u>

## <u>Section – A</u>

## Instructions:

## > From question number 1 to 18, attempt any 15 questions.

- Gain / loss on revaluation at the time of change in profit sharing ratio of existing partners is shared by (i) whereas in case of admission of a partner it is shared by (ii).
- (A) (i) Remaining Partners, (ii) All Partners.
- (B) (i) All Partners, (ii) Old partners.
- (C) (i) New Partner, (ii) All partner.
- (D) (i) Sacrificing Partner, (ii) Incoming partner.
- Calculate the amount of second & final call when Abhijit Ltd, issues Equity shares of ₹10 each at a premium of 40% payable on Application ₹3, On Allotment ₹5, On First Call ₹2.
- (A) Second & final call ₹3.
- (B) Second & final call ₹4.
- (C) Second & final call ₹1.
- (D) Second & final call ₹14.
- **3.** Anish Ltd, issued a prospectus inviting applications for 2,000 shares. Applications were received for 3,000 shares and pro- rata allotment was made to the applicants of 2,400 shares. If Dhruv has been allotted 40 shares, how many shares he must have applied for?
- (A) 40
- (B) 44
- (C) 48
- (D) 52

- 4. Ambrish Ltd offered 2,00,000 Equity Shares of ₹10 each, of these 1,98,000 shares were subscribed. The amount was payable as ₹3 on application, ₹4 an allotment and balance on first call. If a shareholder holding 3,000 shares has defaulted on first call, what is the amount of money received on first call?
- (A) ₹9,000.
- (B) ₹5,85,000.
- (C) ₹5,91,000.
- (D) ₹6,09,000.
- 5. What will be the correct sequence of events?
  (i) Forfeiture of shares. (ii) Default on Calls.
  (iii) Re-issue of shares. (iv) Amount transferred to capital reserve. Options:
- (A) (i), (iv), (ii), (iii)
- (B) (ii), (iv), (i), (iii)
- (C) (ii), (i), (iii), (iv)
- (D) (iii), (iv), (i) (ii)
- **6.** Arun and Vijay are partners in a firm sharing profits and losses in the ratio of 5:1.

## Balance Sheet (Extract)

Liabilities	₹	Assets	₹
		Machinery	40,000

If the value of machinery reflected in the balance sheet is overvalued by 33  $\frac{1}{3}$  %, find out the value of Machinery to be shown in the new Balance Sheet:

- (A) ₹ 44,000
- (B) ₹48,000
- (C) ₹ 32,000
- (D) ₹30,000
- **7.** Which of the following is true regarding Salary to a partner when the firm maintains fluctuating capital accounts?

- (A) Debit Partner's Loan A/c and Credit P & L Appropriation A/c.
- (B) Debit P & L A/c and Credit Partner's Capital A/c.
- (C) Debit P & L Appropriation A/c and Credit Partner's Current A/c.
- (D) Debit P & L Appropriation A/c and Credit Partner's Capital A/c.
- **8.** At the time of reconstitution of a partnership firm, recording of an unrecorded liability will lead to:
- (A) Gain to the existing partners
- (B) Loss to the existing partners
- (C) Neither gain nor loss to the existing partners
- (D) None of the above
- 9. E, F and G are partners sharing profits in the ratio of 3:3:2. According to the partnership agreement, G is to get a minimum amount of ₹80,000 as his share of profits every year and any deficiency on this account is to be personally borne by E. The net profit for the year ended 31st March 2021 amounted to ₹3,12,000. Calculate the amount of deficiency to be borne by E?
- (A) ₹1,000
- (B) ₹4,000
- (C) ₹8,000
- (D) ₹2,000
- **10.** At the time of admission of a partner, what will be the effect of the following information?

Balance in Workmen compensation reserve ₹40,000. Claim for workmen compensation ₹45,000.

- (A) ₹45,000 Debited to the Partner's capital Accounts.
- (B) ₹40,000 Debited to Revaluation Account.
- (C) ₹5,000 Debited to Revaluation Account.
- (D) ₹5,000 Credited to Revaluation Account.

- **11.** In the absence of partnership deed, a partner is entitled to an interest on the amount of additional capital advanced by him to the firm at a rate of:
- (A) entitled for 6% p.a. on their additional capital, only when there are profits.
- (B) entitled for 10% p.a. on their additional capital
- (C) entitled for 12% p.a. on their additional capital
- (D) not entitled for any interest on their additional capitals.
- **12.** Revaluation of assets at the time of reconstitution is necessary because their present value may be different from their:
- (A) Market Value.
- (B) Net Value.
- (C) Cost of Asset
- (D) Book Value.
- 13. If average capital employed in a firm is ₹8,00,000, average of actual profits is ₹1,80,000 and normal rate of return is10%, then value of goodwill as per capitalization of average profits is:
- (A) ₹10,00,000
- (B) ₹18,00,000
- (C) ₹80,00,000
- (D) ₹78,20,000
- **14.** In which of the following situation Companies Act 2013 allows for issue of shares at discount?
- (A) Issued to vendors.
- (B) Issued to public.
- (C) Issued as sweat equity.
- (D) None of the above.
- **15.** As per Section 52 of Companies Act 2013, Securities Premium Reserve cannot be utilised for:

- (A) Writing off capital losses.
- (B) Issue of fully paid bonus shares.
- (C) Writing off discount on issue of securities.
- (D) Writing off preliminary expenses.
- 16. Net Assets minus Capital Reserve is:
- (A) Purchase consideration
- (B) Goodwill
- (C) Total assets
- (D) Liquid assets
- **17.** Kalki and Kumud were partners sharing profits and losses in the ratio of 5:3. On 1st April,2021 they admitted Kaushtubh as a new partner and new ratio was decided as 3:2:1.

Goodwill of the firm was valued as ₹3,60,000. Kaushtubh couldn't bring any amount for goodwill. Amount of goodwill share to be credited to Kalki and Kumud Account's will be: -

- (A) ₹ 37,500 and ₹22,500 respectively
- (B) ₹ 30,000 and ₹30,000 respectively
- (C) ₹ 36,000 and ₹24,000 respectively
- (D) ₹ 45,000 and ₹15,000 respectively
- 18. Sarvesh, Sriniketan and Srinivas are partners in the ratio of 5:3: 2. If Sriniketan's share of profit at the end of the year amounted to ₹1,50,000, what will be Sarvesh's share of profits?
- (A) ₹5,00,000.
- (B) ₹1,50,000.
- (C) ₹3,00,000.
- (D) ₹2,50,000.

## <u> Part – I</u>

## <u>Section – B</u>

## Instructions:

## > From question number 19 to 36, attempt any 15 questions.

19. Angle and Circle ware partners in a firm. Their Balance Sheet showed Furniture at ₹2,00,000; Stock at ₹1,40,000; Debtors at ₹1,62,000 and Creditors at ₹60,000. Square was admitted and new profit-sharing ratio was agreed at 2:3:5. Stock was revalued at ₹1,00,000, Creditors of ₹15,000 are not likely to be claimed, Debtors for ₹2,000 have become irrecoverable and Provision for doubtful debts to be provided @ 10%.

Angle's share in loss on revaluation amounted to ₹30,000. Revalued value of Furniture will be:

- (A) ₹2,17,000
- (B) ₹1,03,000
- (C) ₹3,03,000
- (D) ₹1,83,000
- **20.** Asha and Nisha are partner's sharing profits in the ratio of 2:1. Kashish was admitted for 1/4 share of which 1/8 was gifted by Asha. The remaining was contributed by Nisha.

Goodwill of the firm is valued at  $\gtrless$  40,000. How much amount for goodwill will be credited to Nisha's Capital account?

- (A) ₹2,500.
- (B) ₹5,000.
- (C) ₹20,000.
- (D) ₹ 40,000.
- 21. At the time of admission of new partner Vasu, Old partners Paresh and Prabhav had debtors of ₹6,20,000 and a provision for doubtful debts of ₹20,000 in their books. As per terms of admission, assets were revalued, and it was found that debtors worth ₹15,000 had turned bad and hence should be written off. Which journal entry reflects the correct accounting treatment of the above situation.

(A)	Bad Debts A/c To Sundry Debtors	Dr.	15,000	15,000
	Provision for Doubtful Debts A/c To Bad Debts A/c	Dr.	15,000	15,000
(B)	Bad Debt A/c Dr. To Sundry Debtors		15,000	15,000
	Revaluation A/c To Provision for Doubtful Debts	Dr. A/c	15,000	15,000
(C)	Revaluation A/c To Sundry Debtors A/c	Dr.	15,000	15,000
(D)	Bad Debt A/c To Revaluation A/c	Dr.	15,000	15,000

**22.** Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R)

**Assertion (A)**: Transfer to reserves is shown in P & L Appropriation A/c.

**Reason (R)**: Reserves are charge against the profits.

In the context of the above statements, which one of the following is correct?

# Codes:

- (A) (A) is correct, but (R) is wrong.
- (B) Both (A) and (R) are correct.
- (C) (A) is wrong, but (R) is correct.
- (D) Both (A) and (R) are wrong.
- 23. Anubhav, Shagun and Pulkit are partners in a firm sharing profits and losses in the ratio of 2:2:1. On 1st April 2021, they decided to change their profit-sharing ratio to 5:3:2. On that date, debit balance of Profit & Loss A/c ₹30,000 appeared in the balance sheet and partners decided to pass an adjusting entry for it.

Which of the undermentioned options reflect correct treatment for the above treatment?

- (A) Shagun's capital account will be debited by ₹3,000 and Anubhav's capital account credited by ₹3,000
- (B) Pulkit's capital account will be credited by ₹3,000 and Shagun's capital account will be credited by ₹3,000
- (C) Shagun's capital account will be debited by ₹30,000 and Anubhav's capital account credited by ₹30,000
- (D) Shagun's capital account will be debited by ₹3,000 and Anubhav's and Pulkit's capital account credited by ₹2,000 and ₹1,000 respectively.
- 24. A, B and C are partners, their partnership deed provides for interest on drawings at 8% per annum. B withdrew a fixed amount in the middle of every month and his interest on drawings amounted to ₹4,800 at the end of the year. What was the amount of his monthly drawings?
- (A) ₹10,000.
- (B) ₹5,000.
- (C) ₹1,20,000.
- (D) ₹48,000.
- 25. Abhay and Baldwin are partners sharing profit in the ratio 3:1. On 31st March 2021, firm's net profit is ₹1,25,000. The partnership deed provided interest on capital to Abhay and Baldwin ₹15,000 & ₹10,000 respectively and Interest on drawings for the year amounted to ₹6000 from Abhay and ₹4000 from Baldwin. Abhay is also entitled to commission @10% on net divisible profits. Calculate profit to be transferred to Partners Capital A/c's.
- (A) ₹1,00,000
- (B) ₹1,10,000
- (C) ₹1,07,000
- (D) ₹90,000
- **26.** Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):

**Assertion (A)**: Revaluation A/c is prepared at the time of Admission of a partner.

**Reason (R):** It is required to adjust the values of assets and liabilities at the time of admission of a partner, so that the true financial position of the firm is reflected.

In the context of the above two statements, which of the following is correct?

# Codes:

- (A) Both (A) and (R) are correct and (R) is the correct reason of (A).
- (B) Both (A) and (R) are correct but (R) is not the correct reason of (A).
- (C) Only (R) is correct.
- (D) Both (A) and (R) are wrong.
- 27. Apaar Ltd forfeited 4,000 shares of ₹20 each, fully called up, on which only application money of ₹6 has been paid. Out of these 2,000 shares were reissued and ₹8,000 has been transferred to capital reserve. Calculate the rate at which these shares were reissued.
- (A) ₹20 Per share
- (B) ₹18 Per share
- (C) ₹22 Per share
- (D) ₹8 Per share
- **28.** Which of the following statement is/are true?
  - (i) Authorized Capital < Issued Capital
  - (ii) Authorized Capital ≥ Issued Capital
  - (iii) Subscribed Capital ≤ Issued Capital
  - (iv) Subscribed Capital > Issued Capital
- (A) (i) only
- (B) (i) and (iv) Both
- (C) (ii) and (iii) Both
- (D) (ii) only
- **29.** Mickey, Tom and Jerry were partners in the ratio of 5:3:2. On 31st March 2021, their books reflected a net profit of ₹2,10,000. As per the terms of the partnership deed they were entitled for interest on

capital which amounted to  $\gtrless 80,000$ ,  $\gtrless 60,000$  and  $\end{Bmatrix} 40,000$  respectively. Besides this a salary of  $\gtrless 60,000$  each was payable to Mickey and Tom.

Calculate the ratio in which the profits would be appropriated.

(A) 1:1:1

- (B) 5:3:2
- (C) 7:6:2
- (D) 4:3:2
- 30. Mohit had been allotted for 600 shares by a Govinda Ltd on pro rata basis which had issued two shares for every three applied. He had paid application money of ₹3 per share and could not pay allotment money of ₹5 per share. First and final call of ₹2 per share was not yet made by the company. His shares were forfeited. the following entry will be passed:

₹Y

Equity Share Capital A/c Dr ₹X

To share Forfeited A/c

To Equity Share Allotment A/c ₹Z

Here X, Y and Z are:

- (A) ₹ 6,000; ₹2,700; ₹3,000 respectively.
- (B) ₹ 9,000; ₹2,700; ₹4,500 respectively.
- (C) ₹ 4,800; ₹2,700; ₹2,100 respectively.
- (D) ₹ 7,200; ₹2,700; ₹4,500 respectively.
- **31.** Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):

**Assertion (A):** In case of shares issued on Pro-rata basis, excess money received at the time of application can be utilised till allotment only.

**Reason (R):** Company has to pay interest on calls in advance @12% p.a. for amount adjusted towards calls (if any). In the context of the above two statements, which of the following is correct?

## Codes:

- (A) Both (A) and (R) are true, but (R) is not the explanation of working capital management.
- (B) Both(A) and (R) are true and (R) is a correct explanation of (A).
- (C) Both (A) and (R) are false.
- (D) (A) is false, but (R) is true.
- 32. Ajay and Vinod are partners in the ratio of 3:2. Their fixed Capital were ₹3,00,000 and ₹4,00,000 respectively. After the close of accounts for the year it was observed that the Interest on Capital which was agreed to be provided at 5% pa was erroneously provided at 10%p.a. By what amount will Ajay's account be affected if partners decide to pass an adjustment entry for the same?
- (A) Ajay's Current A/c will be Debited by ₹15,000.
- (B) Ajay's Current A/c will be Credited by ₹6,000.
- (C) Ajay's Current A/c will be Credited by ₹35,000.
- (D) Ajay's Current A/c will be Debited by ₹20,000.
- 33. Vishnu Ltd. forfeited 20 shares of ₹10 each, ₹8 called up, on which John had paid application and allotment money of ₹5 per share, of these, 15 shares were reissued to Parker as fully paid up for ₹6 per share. What is the balance in the share Forfeiture Account after the relevant amount has been transferred to Capital Reserve Account?
- (A) ₹0
- (B) ₹5
- (C) ₹25
- (D) ₹100
- 34. Newfound Ltd took over business of Old land ltd and paid for it by issue of 30,000, Equity Shares of ₹100 each at a par along with 6% Preference Shares of ₹1,00,00,000 at a premium of 5% and a cheque of ₹8,00,000. What was the total agreed purchase consideration payable to Old Land ltd.
- (A) ₹1,05,00,000.
- (B) ₹1,43,00,000.

- (C) ₹1,40,00,000.
- (D) ₹1,35,00,000.
- **35.** A and B are partners in the ratio of 3:2. C is admitted as a partner and he takes 1/4th of his share from A. B gives 3/16 from his share to C. What is the share of C?
- (A) 1/4
- (B) 1/16
- (C) 1/6
- (D) 1/16
- 36. Krishan Ltd has Issued Capital of 20, 00,000 Equity shares of ₹10 each. Till Date ₹8 per share have been called up and the entire amount received except calls of ₹4 per share on 800 shares and ₹3 per share from another holder who held 500 shares. What will be amount appearing as 'Subscribed but not fully paid capital' in the balance sheet of the company?
- (A) ₹ 2,00,00,000
- (B) ₹ 1,95,99,000
- (C) ₹ 1,59,95,300
- (D) ₹ 1,99,95,300

### <u> Part – I</u>

### Section - C

### Instructions:

> From question number 37 to 41, attempt any 4 questions.

# Question no.'s 37 and 38 are based on the hypothetical situation given below.

Bright Star Limited is engaged in manufacture of high-end medical equipment. Considering the prospects of high growth in this segment the company has decided to expand and for this purpose additional investment of ₹50,00,00,000 is required. Directors have decided that

20% of this requirement would be financed by raising long term debts and balance by issue of Equity shares.

As per memorandum of association of the company the face value of Equity shares is ₹100 each. Also, considering the market standing of the company these shares would be issued at a premium of 25%. Directors decided to issue sufficient shares to collect the desired amount (including premium).

The prospectus was issued to public, and the issue was oversubscribed by 2,00,000 shares which were issued letters of regret. Answer the below mentioned questions considering that the entire amount was payable on application.

- **37.** What is the total amount collected on application?
- (A) ₹42,50,00,000
- (B) ₹40,00,00,000
- (C) ₹32,00,00,000
- (D) None of the above
- 38. How many Equity shares were offered for issue by Bright Star Ltd?(A) 40,00,000 shares.
- (B) 50,00,000 shares.
- (C) 35,00,000 shares.
- (D) 32,00,000 shares.

# Question no.'s 39, 40 and 41 are based on the hypothetical situation given below.

On 1st September 2020, twenty students of Modern College started their Partnership Firm in the name of "Be Safe" for selling sanitisers on digital mode. Since they were good friends of each other, they were not having any explicit agreement in place. All of them have agreed to invest ₹15,000/- each as capital. The books were closed on 31st March 2021, on which date the following information was provided by the firm:

PARTICULARS	AMOUNT (₹)
Sale of Sanitisers	1,20,000
Cost of goods sold	50,000
Total Remuneration to partners	2,000 per month
Rent to a partner	1,000 per month
Manager's Commission	5,000
Closing Stock as on March 31,2021	9,000
6% Fixed Deposit (made on 31.3.2021)	20,000

- **39.** Calculate the amount of profits to be transferred to Profit and Loss Appropriation Account. -
- (A) Profit ₹58,000
- (B) Profit ₹44,000
- (C) Profit ₹59,200
- (D) Profit ₹58,700
- **40.** On 31st March 2021, Remuneration to Partners will be provided to the partners of "Be Safe" but only out of:
- (A) Profits for the accounting year
- (B) Reserves
- (C) Accumulated Profits
- (D) Goodwill
- 41. On 01st December 2020 one of the partners of the firm introduced additional capital of ₹30,000 and also advanced a loan of ₹40,000 to the firm. Calculate the amount of interest that Partner will receive for the current accounting period-
- (A) ₹4,200
- (B) ₹1,400
- (C) ₹ 1575
- (D) ₹800

## <u> Part – II</u>

## <u>Section – A</u>

## Instructions:

# > From question number 42 to 48, attempt any 5 questions.

**42.** Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):

**Assertion (A)**: The focus of calculation of working capital revolves around managing the operating cycle of the business.

**Reason (R)**: It is because the concept of operating cycle is required to ascertain the liquidity of assets and urgency of payments to liabilities.

In the context of the above two statements, which of the following is correct?

# Codes:

- (A) Both (A) and (R) are true, but (R) is not the explanation of working capital management.
- (B) Both(A) and (R) are true and (R) is a correct explanation of (A).
- (C) Both (A) and (R) are false.
- (D) (A) is false, but (R) is true.
- **43.** Which of the following are included in traditional classification of ratios?
  - (i) Liquidity Ratios.
  - (ii) Statement of Profit and loss Ratios.
  - (iii) Balance Sheet Ratios.
  - (iv) Profitability Ratios.
  - (v) Composite Ratios.
  - (vi) Solvency Ratios.
- (A) (ii), (iii) and (v)
- (B) (i), (iv) and (vi)
- (C) (i), (ii) and (vi)
- (D) All (i), (ii), (iii), (iv), (v), (vi)

- 44. The following groups of ratios primarily measure risk:
- (A) solvency, activity, and profitability
- (B) liquidity, efficiency, and solvency
- (C) liquidity, activity, and profitability
- (D) liquidity, solvency, and profitability
- **45.** Which one of the following is correct?
- (i) A ratio is an arithmetical relationship of one number to another number.
- (ii) Liquid ratio is also known as acid test ratio.
- (iii) Ideally accepted current ratio is 1: 1.
- (iv) Debt equity ratio is the relationship between outsider's funds and shareholders' funds.

In the context of the above two statements, which of the following options is correct?

- (A) All (i), (ii), (iii) and (iv) are correct.
- (B) Only (i), (ii) and (iv) are correct.
- (C) Only (ii), (iii) and (iv) are correct.
- (D) Only (ii) and (iv) are correct.
- 46. Which of the following are the tools of Vertical Analysis?
  - (i) Ratio Analysis.
  - (ii) Comparative Statements.
  - (iii) Common Size Statements.
- (A) Only (iii)
- (B) Both (i) and (iii)
- (C) Both (i) and (ii)
- (D) Only (i)

**47.** Match the items given in Column I with the headings/subheadings (Balance sheet) as defined in Schedule III of Companies Act 2013.

Column I	Column II	
(I) Loose Tools	(a) Intangible fixed assets	
(Ii) Patents	(b)Other current assets	
(III) Prepaid insurance	(c) Long term Borrowings	
(IV) Debentures	(d) Inventories	
(V) Machinery	(e) Tangible Fixed assets	

Choose the correct option:

- A. (I)-(a), (II)-(b), (III)- (d), (IV)- (c), (V)-(e)
- B. (I)-(d), (II)- (a), (III)-(b), (IV)- (c), (V)-(e)
- C. (I)-(d), (II)- (a), (III)-(b), (IV)-(e), (V)-(c)
- D. (I)- (e), (II)- (d), (III)- (a), (IV)-(b), (V)-(b)

**48.** Which ratio indicates the proportion of assets financed out of shareholders' funds?

- (A) Debt equity ratio.
- (B) Fixed assets turnover ratio.
- (C) Proprietary ratio.
- (D) Total assets to debt ratio.

#### <u>Part – II</u>

### <u>Section – B</u>

### Instructions:

- > From question number 49 to 55, attempt any 6 questions.
- **49.** If Total sales is ₹2,50,000 and credit sales is 25% of Cash sales. The amount of credit sales is:
- (A) ₹50,000
- (B) ₹2,50,000
- (C) ₹16,000
- (D) ₹3,00,000

- 50. What will be the amount of gross profit of a firm if its average inventory is ₹80,000, Inventory turnover ratio is 6 times, and the Selling price is 25% above cost?
- (A) ₹1,20,000.
- (B) ₹1,60,000.
- (C) ₹2,00,000.
- (D) None of the above.
- **51.** Which of the following statements are false?
- a) When all the comparative figures in a balance sheet are stated as percentage of the total, it is termed as horizontal analysis.
- b) When financial statements of several years are analysed, it is termed as vertical analysis.
- c) Vertical Analysis is also termed as time series analysis.

Choose from the following options:

- (A) Both (a) and (b)
- (B) Both (a) and (c)
- (C) Both (b) and (c)
- (D) All three (a), (b), (c)
- **52.** Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):

**Assertion (A)**: Increasing the value of closing inventory increases profit.

**Reason (R)**: Increasing the value of closing inventory reduces cost of goods sold.

In the context of the above two statements, which of the following is correct?

## Codes:

- (A) Both (A) and (R) are correct and (R) is the correct reason of (A).
- (B) Both (A) and (R) are correct but (R) is not the correct reason of (A).
- (C) Only (R) is correct.
- (D) Both (A) and (R) are wrong.

**53.** Given below are two statements, one labelled as Assertion (A) and the other labelled as Reason (R):

**Assertion (A)**: A high operating ratio indicates a favourable position.

**<u>Reasoning (R)</u>**: A high operating ratio leaves a high margin to meet non-operating expenses.

In the context of the above two statements, which of the following is correct?

## Code:

- (A) (A) and (R) both are correct and (R) correctly explains (A).
- (B) Both (A) and (R) are correct but (R) does not explain (A).
- (C) Both (A) and (R) are incorrect.
- (D) (A) is correct but (R) is incorrect.
- **54.** Current ratio of Adaar Ltd. is 2.5:1. Accountant wants to maintain it at 2:1. Following options are available.
  - (i) He can repay Bills Payable
  - (ii) He can purchase goods on credit
  - (iii) He can take short term loan

Choose the correct option.

- (A) Only (i) is correct
- (B) Only (ii) is correct
- (C) Only (i) and (iii) are correct
- (D) Only (ii) and (iii) are correct
- **55.** A company has an operating cycle of eight months. It has accounts receivables amounting to ₹1,00,000 out of which ₹60,000 have a maturity period of 11 months. How would this information be presented in the balance sheet?
- (A) ₹40000 as current assets and ₹60,000 as non-current assets.
- (B) ₹60,000 as current assets and ₹40,000 as non-current assets.
- (C) ₹1,00,000 as non-current assets.
- (D) ₹1,00,000 as Current assets.

# SAMPLE QUESTION PAPER: 5 CLASS XII BUSINESS STUDIES TERM 1

### Maximum Marks: 40

General Instructions:			
<ol> <li>The Question Paper contains 3 sections.</li> <li>Section A has 24 questions. Attempt any 20 questions.</li> </ol>			
3. Section B has 24 questions. Attempt any 20 questions.			
5. All questions carry equal marks.			
6. There is NO negative marking.			
Section	A		
1. Coordination is			
(i) function of management	(ii) an objective of management		
(iii) the essence of management	(iv) a level of management		
2. Principles of management are not			
(i) flexible.	(ii) absolute.		
(iii) universal.	(iv) behavioural.		
3. Which of the following is not a component of econom	nic environment?		
(i) Composition of trade	(ii) Infrastructure		
(iii) Economic development	(iv) Legislations passed by the government		
4. The following is not an objective of lower management	nt:		
(i) Quality products	(ii) Growth and development		
(iii) Innovation	(iv) Policy formulation		
5. Which concept was developed to establish a direct emergency to avoid delay in communication?	contact with an employee of equal rank in case of		
(i) Scalar chain	(ii) Centralisation		
(iii) Equity	(iv) Gang plank		
6 is the marketing function which is o	concerned with informing the customers about the		
firm's products.			
(i) Transportation	(ii) Selling		
(iii) Advertising	(iv) Public relations		
<b>7.</b> Which of the following is not a feature of marketing?			
(i) Integrated	(ii) Dynamic		
(iii) Seller focus	(iv) Pervasive		
8. Which of the following is not an element of delegatio	n?		
(i) Authority	(ii) Responsibility		
(iii) Accountability	(iv) Decentralisation		
<b>9.</b> Which of the following is not a feature of standing pla	ans?		
(i) Recurring in nature	(ii) Based on main organisational objective		
(iii) Prepared for specific situation	(iv) Developed once can be modified later		

Time: 90 Minutes

## 2 Business Studies—XII

	<b>10.</b> is a statement of expected results in numerical terms.		
		(i)	Forecast (ii) Budget
	(iii)	Plan	(iv) Estimate
11.		is an example of social environment	nt.
	(i)	Inflation	(ii) Legislation
	(iii)	Composition of family	(iv) Innovations
12.	"The	e idea is to persuade the consumer to buy cept is highlighted here?	the product by any means necessary." Which marketing
	(i)	Production concept	(ii) Product concept
	(iii)	Selling concept	(iv) Marketing concept
13.	Cori	rugated boxes are part of	
	(i)	Primary package.	(ii) Secondary package.
	(iii)	Transportation package.	(iv) Labels.
14.	Whi	ch one of the following is not an aspect of t	he characteristic of management being multi-dimensional?
	(i)	Management of work	(ii) Management of people
	(iii)	Management of goals	(iv) Management of operations
15.		involves harmony and team spirit a	among employees.
	(i)	Discipline	(ii) Esprit de corps
	(iii)	Order	(iv) Standardisation
16.	"Subsidy provided by the government for textile industries has a positive impact on textile businessmen." Which component of business environment is highlighted in this case?		
	(i)	Economic environment	(ii) Technological environment
	(iii)	Political environment	(iv) Legal environment
17.	Acco influ	ording to Keith Davis, business environme vences that surround and affect it.	nt is the aggregate of all conditions,and
	(i)	factors	(ii) events
	(iii)	units	(iv) institutions
18.		premises can be measured in c	uantitative terms.
	(i)	Tangible	(ii) Intangible
	(iii)	Constant	(iv) Variable
19.	"PQ	R Ltd. decided to give 40% jobs to women."	What type of plan is highlighted here?
	(i)	Strategy	(ii) Objective
	(iii)	Rule	(iv) Policy
20.	Asse	ertion (A): The activities of each departmen	t need to be linked through coordination.
	<b>Reason (R):</b> Specialists think that they are qualified to evaluate and make decisions according to thei professionally set criteria.		
	(i)	Both (A) and (R) are correct and (R) is the	correct explanation of (A).
	(ii)	Both (A) and (R) are correct but (R) is not t	he correct explanation of (A).
	(iii)	(A) is correct but (R) is incorrect.	
	(iv)	(A) is incorrect but (R) is correct.	
21.		is the organisational structure in w	hich no department is responsible for end results.
	(i)	Divisional structure	(ii) Functional structure
	(iii)	Formal	(iv) Informal

22. \_\_\_\_\_ involves designing and producing container or wrapper for the product.

- (i) Marketing
- (iii) Advertising
- **23.** "This concept emphasises on organisations to evaluate the demands of the consumers and produce products or services to fulfil these wants." Which marketing concept is highlighted here?
  - (i) Production concept (ii) Product concept
  - (iii) Selling concept (iv) Marketing concept
- 24. The verbal component of brand is known as
  - (i) brand
  - (iii) brand name

(ii) brand mark

(ii) Selling

(iv) Packaging

(iv) trademark

#### Section **B**

- **25.** Cool Tech Limited has a target to sell two lakh units of refrigerators in three months. To achieve this target, the production department employed contractual staff to produce rigorously, and the sales department started making strategies to sell the products. Which characteristic of management is highlighted here?
  - (i) Goal-oriented (ii) Continuous process
  - (iii) Group activity (iv) Dynamic
- **26.** Mr. Raman visits a company and observes that there is a reception at the entrance, a first aid box was kept there, a list of emergency contacts was pasted on the wall, there were properly maintained registers for visitors, employee attendance, etc. Which principle of management is being observed here?
  - (i) Order (ii) Equity
  - (iii) Unity of Command (iv) Unity of Direction
- **27.** Management of Info Max Limited is following a practice in which it transfers a particular project to the senior management. The senior management then divides and allocates the tasks to the teams. This is helping the company meet all the timelines. Which principle of management is highlighted here?
  - (i) Unity of Command (ii) Unity of Direction
  - (iii) Division of Work (iv) Decentralisation
- **28.** "Digital Transformation drives foundational change in how an organisation operates, optimizes internal resources, and delivers value to customers." Which aspect of business environment is highlighted by this statement?
  - (i) Technological

(iii) Legal

- (ii) Economic
- (iv) Legal and Economic

(ii) Rule, Policy, Policy, Rule

- 29. Which type of plan is highlighted in the following cases?
  - (a) No smoking in the factory premises.
  - (b) Women hiring reserved at 30% of the total employees.
  - (c) Penalties on using office printer for extracting personal printouts.
  - (d) Girls will be given a discount of 10% in fees.
  - (i) Rule, Rule, Policy, Policy
  - (iii) Policy, Policy, Rule, Rule (iv) Rule, Policy, Rule, Policy
- **30.** Identify the type of plan:
  - "It serves as a guide for overall planning."
  - (i) Goal
  - (iii) Strategy

- (ii) Objective
- (iv) Policy

#### 4 Business Studies—XII

- **31.** Sohna Industries is a company manufacturing office furniture. The company chose to diversify its operations to improve its growth potential and increase market share. As the project was important, many alternatives were generated for the purpose and were thoroughly discussed among the members of the organisation. After evaluating the various alternatives, Mr. Amar, the Managing Director of the company, decided that they should add 'Home Interiors and Furnishings' as a new line of business activity. Name the framework, which the diversified organisation should adopt to enable it to cope with the emerging complexity.
  - (i) Functional (ii) Divisional
  - (iii) Formal (iv) Informal
- **32.** Raman started a baking business. He set the target of earning 15% profit on sales in the first year. As a good businessman, he was concerned about the future of the business. So, he analysed the market and came to know that the demand for bakery products is increasing day by day. He used this information for future planning. He discussed the gathered information with his team to find innovative ways to achieve the objectives. Identify the step, followed by Raman that is related to the process of one of the functions of management.
  - (i) Follow up action

(ii) Selecting from alternatives

(iii) Developing premises

- (iv) Evaluating alternatives
- **33.** Simran and Deepak are receptionists in a company having the same educational qualification. Simran is getting INR 10,000 per month and Deepak INR 15,000 per month as salary for the same working hours. Which principle of management is violated in this case?
  - (i) Equity

(ii) Discipline

(iii) Scalar chain

- (iv) Unity of Command
- **34.** Mr. Atul is the Chief Operating Officer of Electro Plus Appliances Limited. The company is currently operating through its 60 stores spread across India. The company is having a large customer base. As part of the expansion agenda, Mr. Atul has decided to double the number of stores and strategically locate them in the uncatered markets. The information of this decision has been communicated to all the departments so that all departments can start working in sync with the decision. Identify the stage of 'planning process', which is being completed by Mr. Atul in this case.
  - (i) Setting objectives

(iii) Assignment of duties

- (ii) Follow-up action
- (iii) Identifying alternative courses of action
- (iv) Evaluating alternative courses
- **35.** Identify the method of sales promotion used by Glow and Shine Limited:

Glow and Shine Limited is offering 40% extra shampoo in the packaging of 500 ml.

- (i) Quantity Gift (ii) Sample Distribution
- (iii) Usable Benefit (iv) Product Combination
- **36.** Mandana Ltd. has a target production of 10,000 units in a year. To achieve this target the manager must operate on double shifts due to power failure issues in the area where the factory is located. The manager is able to produce 10,000 units but at a higher production cost. In the above case, identify the status of the manager.
  - (i) Manager was effective
- (ii) Manager was efficient
- (iii) Manager was effective but not efficient
- (iv) Manager was efficient but not effective
- **37.** Mr. Amar has joined as the CEO of an apparel company. He always ensures that the work has been divided into small and manageable activities and also the activities of similar nature are grouped together. Identify the related step in organising process being mentioned in the above lines.
  - (i) Division of work (ii) Departmentalisation
    - (iv) Establishing reporting responsibilities
- **38.** Mr. Anil and Mr. Rahul are working as Marketing Managers respectively in 'ABC Limited' and 'PQR Limited'. Mr. Anil closely monitors the business environment so that he is aware even of the small changes taking place in the market and prepares himself well in advance to deal with it. Contrary to Mr. Anil, Mr. Rahul is indifferent to the dynamic nature of the business environment. Gradually, 'ABC Limited' emerged as the

leader in the market whereas 'PQR Limited' started losing its share in the market. Identify the point of 'importance of business environment' which is referred to by the scenario stated above.

- (i) It helps in understanding the economic environment.
- (ii) It helps in the growth of business.
- (iii) It helps in understanding future problems and prospects.
- (iv) Provides first-mover advantage.
- **39.** It is difficult to find one single person with all the needed qualities, Taylor suggested appointment of a specialist through this technique of scientific management. Identify the technique.
  - (i) Standardisation and simplification of work (ii) Method study
  - (iii) Functional foremanship (iv) Motion study
- **40.** For the following two statements, choose the correct option:

Statement I: Efficiency aims at performing tasks and least wastage of time and effort.

Statement II: Efficiency is about doing the job in a cost effective manner.

Choose the correct option from the options given below:

- (i) Both the statements are correct.
- (ii) Statement I is correct but Statement II is wrong.
- (iii) Statement II is correct but Statement I is wrong.
- (iv) Both the statements are incorrect.
- **41.** Arun has conceived the idea of manufacturing green tea and wants to be the leading manufacturer of green tea worldwide. He observed that the various variants in green tea are available in the market and the products were expensive as the demand of the products is more than the supply. He wants to promote the products in a way that is:

• Economically viable • Environment-friendly • Protects public health

The main focus area in Arun's list of action is the amount paid by the customers to purchase the products. He thoroughly studied the competitors, their cost of products and market share. After the analysis he came to the conclusion that consumer will compare the value of the product to the value of money they are ready to pay for the product. Since, he was entering a new market he felt that he won't be able to cover all costs. For the survival of business in long run, adequate profits are to be earned. To stand different in the market, he decided to provide free home delivery of the products and also improved the packaging by adding a free pouch of herbal tea to attract customers. Identify the concept discussed above.

- (i) Product Mix
- (ii) Price Mix
- (iii) Place Mix (iv) Promotion Mix
- **42.** For the following two statements, choose the correct option:

Statement I: Accountability can be delegated.

Statement II: Responsibility can be delegated completely.

- Choose the correct option from the options given below:
- (i) Statement I is correct and II is wrong
- (ii) Statement II is correct and I is wrong
- (iii) Both the statements are correct (iv) Both the statements are incorrect
- **43.** The technique of Scientific Management given by Taylor, which aims to establish interchangeability of manufactured parts and products is \_\_\_\_\_\_.
  - (i) Method Study
- (ii) Motion Study
- (iv) Differential Piece Wage System
- **44.** A person feeling hungry may get food by offering money or some other product in return to someone who is willing to accept the same for food. The highlighting feature of marketing illustrated above is:
  - (i) Exchange mechanism

(iii) Standardisation

(ii) Customer value

(iii) Creating a market offering

(iv) Needs and wants

#### 6 Business Studies—XII

**45.** Arrange the following steps in the process of organising in the correct sequence:

(a)	Assignment of duties	(b) Departmentalisation
(c)	Identification and division of work	(d) Establishing reporting relationship
	Choose the correct option:	
(i)	(a); (b); (d); (c)	(ii) (c); (b); (a); (d)

- (iii) (c); (b); (d); (a) (iv) (b); (c); (a); (d)
- **46.** Which step in the process of planning will precede the step in which the manager is required to make certain assumptions about the future, which becomes the base upon which the plans are made.
  - (i) Implementing the plan (ii) Identifying alternative courses of action
    - (iii) Setting objectives (iv) Selecting an alternative
- **47.** Benzon Apparels Limited is using banned animal skin for making leather wallets, leather bags and clutches and earning huge profits. Which market concept is ignored here?
  - (i) Production Concept
- (ii) Selling Concept
- (iii) Marketing Concept (iv) Social Marketing Concept
- **48.** Professions such as medicine, chartered accountancy or law require a practising doctor, chartered accountant or lawyer to possess valid degrees, nowhere in the world is it mandatory for a manager to possess any such professional degree. Identify the characteristic of the profession being discussed in this case which is not being strictly met by management.
  - (i) Well-defined body of knowledge
- (ii) Restricted entry
- (iii) Professional association (iv) Ethical code of conduct

#### Section C

#### Read the following text and answer question numbers 49–54 on the basis of the same.

The CEO of Techno World Pvt. Ltd. decided to have a meeting of all key employees of different departments of the organisation. The main motive of the meeting was to tell the employees to keep 30% increase in sales target as the main objective for the year.

The meeting was flooded with ideas regarding the processes involved. Various strategies and plans were made to streamline the processes. Afer a few days, the capability of the organisation to adapt to the new situation was assessed keeping in view the external business environment and it was found that the company was moving on the right track.

The CEO of the company also directed all the staff members to follow the targets and advised them to put their best efforts in achieving the sales targets. The employees admitted that they had learnt a lot under the able guidance of the CEO and were able to meet their targets. This led to an increase in their compensation. The CEO also recruited technical professionals to train the employees.

- **49.** Identify the importance of management highlighted above.
  - (i) Helps in achieving personal objectives
  - (ii) Reduces costs
  - (iii) Peer recognition
  - (iv) Providing quality products at fair prices to society
- **50.** Identify the significance of management relating to the target assigned by the CEO.
  - (i) Establishes equilibrium (ii) Reduces costs
  - (iii) Peer recognition (iv) Helps in achieving group goals
- **51.** When the CEO assigned sales target of 30% to the employees, which characteristic of management is highlighted here?
  - (i) Pervasive (ii) Goal oriented
  - (iii) Continuous (iv) Dynamic

- **52.** "After a few days, the capability of the organisation to adapt to the new situation was assessed keeping in view of the external business environment and it was found that the company was moving on the right track." Which feature of management is reflected by this statement?
  - (i) Pervasive (ii) Goal oriented
  - (iii) Continuous (iv) Dynamic
- 53. Identify the two functions of management discussed in the above case.
  - (i) Planning and Staffing (ii) Staffing and Organising
  - (iii) Planning and Organising (iv) Planning and Coordination
- **54.** The employees of the company met the assigned targets. Which point of importance of management is highlighted in this scenario?
  - (i) Helps in achieving personal objectives
  - (ii) Reduces costs
  - (iii) Increases efficiency
  - (iv) Providing quality products at fair prices to society
- **55.** In the USA, at the time of Christmas, the sale of chocolates and cakes increases. Which dimension of business environment is highlighted here?
  - (i) Economic environment
- (ii) Political environment
- (iii) Legal environment (iv) Social environment
- 56. According to the technique of Scientific management "Differential Piece Wage System", how much more will a worker making 60 units earn as compared to a worker making 49 units? If the standard output per day is 50 units and those who make standard output or more than standard get ` 70 per unit and those below get ` 60 per unit.
  - (i) `4200 (ii) `2940
  - (iii) `1260 (iv) `3000
- 57. Which principle of management is violated in the diagram below?



- (iii) Division of Work
- **58.** Disha, Arnav and Aarti have decided to start a business of manufacturing soft toys. They identified the following main activities which they have to perform:

(iv) Discipline

- 1. Purchase of raw materials,
- 2. Purchase of machinery,
- 3. Production of soft toys,
- 4. Arrangement of finance to start the business,
- 5. Sale of soft toys,
- 6. Identifying the markets where they can sell their soft toys,
- 7. Selection of employees.

In order to facilitate the work they thought that four managers should be appointed to look after-

- 1. Production
- 2. Finance

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- 3. Marketing
- 4. Personnel

Identify the function of management reflected in the above case.

- (i) Planning (ii) Organising
- (iii) Controlling (iv) Coordinating
- **59.** John is working as a production manager in a steel manufacturing company. All his subordinates hold him in high regard for his exceptional managerial and motivational skills. On one hand, as a manager, he is a tough person to deal with as he is always focused on the targets and expects strict compliance to the organisational rules and procedures from his subordinates. On the other hand, he makes conscious efforts to develop compatibility with his subordinates by interacting freely with them during the lunch breaks and going on coffee breaks in the cafeteria. Many a times these chit chats help him to get an insight into the views and opinions of his team members about the policies of the organisation. Identify the two types of organisations reflected in the above case.
  - (i) Divisional and Functional

(ii) Functional and Informal

(iii) Formal and Informal

- (iv) Divisional and Informal
- **60.** In the recent past, e-business in our country has witnessed high growth due to several reasons. There is significant improvement in the IT infrastructure as the government has taken important steps in high-speed internet connectivity. As a result, the broadband networks have not only become better but also more affordable. Also, the speed of internet connectivity has drastically improved with the introduction of 5G. Additionally, government is now focused on making rural India connected through broadband which will help the rural customers to get involved in e-business. Another stimulant strengthening the e-business segment is the country's favourable demography. Notwithstanding the fact that consumers also prefer e-business due to multiple factors like convenience, economy, time, etc. Identify the various dimensions of business environment being referred to in the above case.
  - (i) Political, Economic, Social

(ii) Legal, Social, Technological

(iii) Political, Legal, Social

(iv) Political, Technological, Social

## Sample Question Paper 9

### **DELHI PUBLIC SCHOOL, RANCHI**

SESSION – 2021-22 Practice Worksheet V Class XII Economics Total questions: 60

#### **General Instructions**

- 1. All questions are compulsory.
- 2. There are 6 questions in each chapter.
- 3. This question paper contains MCQs, Case Based MCQs and Assertion-Reason based MCQs.
- 4. Only one of the options in every question is correct.

#### Chapter- Money and Banking

- 1. 'A' has a good that 'B' wants and 'B' also has the good that 'A' wants. This is referred to as \_\_\_\_\_ under the Barter System of exchange.
  - (a) Unit of account
  - (b) Store of value
  - (c) Double coincidence of wants
  - (d) None of the above
- 2. Cheques are examples of \_\_\_\_\_ money.
  - (a) Fiduciary
  - (b) Fiat
  - (c) Authorized
  - (d) All of these

3. **Assertion(A):** Currency held by the public is a monetary liability of the central bank. **Reason(R):** The Central Bank controls credit, whereas commercial banks create credit with the currency held by the public.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

- (c) A is correct but R is wrong.
- (d) A is wrong but R is correct.

4. **Assertion(A):** Central Bank as a banker to the government works as a financial advisor. **Reason(R):** Government borrows internally from banks and the general public.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

The Central Bank of India, i.e. RBI is the apex institution that controls the entire financial market. It's one of the major functions is to maintain the reserve of foreign exchange. Also, it intervenes in the foreign exchange market to stabilise the excessive fluctuations in the foreign exchange rate.

In other words, it is the central bank's job to control a country's economy through monetary policy; if the economy is moving slowly or going backward, there are steps that the central bank can take to boost the economy. These steps, whether they are asset purchases or printing more money, all involve injecting more cash into the economy. The simple supply and demand economic projection occur and currency will devalue.

When the opposite occurs, and the economy is growing, the central bank will use various methods to keep the growth steady and in-line with other economic factors such as wages and prices. Whatever the central bank does or in fact don't do, will affect the currency of that country. Sometimes, it is within the central bank's interest to purposefully affect the value of a currency. For example, if the economy is heavily reliant on exports and their currency value becomes too high, importers of that country's commodities will seek cheaper supply; hence directly affecting the economy.

5. Who has the responsibility to balance the flow of credit and economic growth in the economy?

- (a) Commercial banks
- (b) Central bank
- (c) Government
- (d) Both (b) and (c)

6. The apex banking institution in the country is known as \_\_\_\_\_.

- (a) Commercial Bank
- (b) General government
- (c) Central bank
- (d) None of these

# **Chapter- Government Budget and the Economy**

- 1. \_\_\_\_\_ deficit includes interest payment by the government on the past loans.
  - (a) Revenue deficit
  - (b) Fiscal deficit
  - (c) Primary deficit
  - (d) Both (a) and (b)

2. In a government budget, non-debt creating capital receipts is Rs.200, revenue receipts are Rs.1,500, borrowings are Rs.150 while capital receipts and revenue receipts are respectively Rs. 250 and Rs. 300. What will be the fiscal deficit in this case?

- (a) Rs. 150
- (b) Rs. 300
- (c) Rs. 500
- (d) Cannot be determined

3. **Assertion(A):** Government budget is an annual estimated statement of revenue and expenditure during the coming fiscal year.

Reason(R): Through the government budget, it tries to reduce regional variations.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. Assertion(A): Government imposes heavy taxes on alcohol and gives subsidy of LPG gas.

**Reason(R):** The government undertakes such a measure to ensure economic stability in the country.

Options:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

Budgetary deficit must be financed by either taxation, borrowing or printing money. Governments have mostly relied on borrowing, giving rise to what is called government debt. If the government continues to borrow year after year, then interest payments increase and these further increase the debt. Also, government borrowing from people reduces the savings available to the private sector. This reduces capital formation and growth. These debts increases the burden on future generations as the debts raised today are required to be paid off in future.

- 5. Budgetary deficit can be financed by:
  - (a) Taxation
  - (b) Borrowings
  - (c) Printing money
  - (d) All of the above

6. If the government borrows year after year, then this \_\_\_\_\_ interest payments.

- (a) Increases
- (b) Decreases
- (c) Has no effect on
- (d) None of the above

## Chapter- Foreign Exchange Rate

- 1. The term foreign exchange means:
  - (a) Exchange of goods of one nation for goods of another nation.
  - (b) Exchange of goods of one nation for services of another nation.
  - (c) Exchange of goods of one nation for currency of another nation.
  - (d) Stock of foreign currency with domestic country.
- 2. The gold standard system of exchange rate lost its importance during:
  - (a) 1900s
  - (b) 1910s
  - (c) 1920s
  - (d) None of these

3. **Assertion(A):** Make in India campaign initiated by the government leads to rise in foreign exchange rate.

Reason(R): Inflow of foreign exchange improves the trade deficit of the country.

Options:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. **Assertion(A):** Managed floating exchange rate system is a hybrid system of exchange rate used by most of the countries in recent times.

**Reason(R):** Excessive fluctuation in the exchange rate system is checked by the central authority under the dirty floating exchange rate.

Options:

(a) Both A and R are true and R is the correct explanation of A.

- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

India's exchange rate policy has evolved in line with international and domestic developments. Post-independence, in view of the prevailing Bretton Woods system, the Indian rupee was pegged to the Pound sterling. With the breakdown of the Bretton Woods System, and also the declining share of UK in India's trade, the rupee was delinked from the Pound sterling in September, 1975 to 1992, the exchange rate was officially determined by the RBI within nominal band of plus or minus 5 percent of the weighted basket of currencies of India's major trading partners. This exchange rate was referred to as 'adjustable nominal peg with a band'.

5. Post independence, the exchange rate was determined under:

- (a) Fixed exchange rate system
- (b) Flexible exchange rate system
- (c) Managed floating system
- (d) None of the above

6. **Assertion(A):** Under a fixed exchange rate system, the country's government is responsible for changing the price of foreign exchange as per the developmental needs.

**Reason(R):** Increase in the value of domestic currency as planned by the central bank is a revaluation of domestic currency.

Options:

(a) Both A and R are true and R is the correct explanation of A.

- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) Both are wrong.

## **Chapter- Balance of Payments**

1. Choose the correct pair of statements.

Column I	Column II
1.Export of software to France	i.Debit side of current account
2.Import of machinery from China	ii.Capital account of balance of payments
3.Remmitances to relative staying abroad	iii.Debit side of current account of balance of payments
4.Investment by Apple phones firm in India	iv.Credit side of current account of balance of payments

Codes:

- (a) A-i
- (b) B-ii
- (c) C-iii
- (d) D-iv

2. What will be the impact of Make in India Programme on India's BoP?

- (a) Improve
- (b) Deteriorate
- (c) No change
- (d) Either (a) or (b)

3. **Assertion(A):** Accomodating Transactions are undertaken to make equilibrium in BOP account.

**Reason(R):** Accomodating items are also called above the line items.

Options:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. **Assertion(A):** Purchase of machinery from the rest of the world is an economic transaction of the capital account of BOP.

**Reason(R):** Any transaction that impacts the assets or liabilities of a country are recorded on the current account of BOP.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

National Income and balance of payments are two important macroeconomic variables. In an open economic model, national income is sum total of expenditures of all the sectors of an economy. GDP is probably the most widely reported and closely monitored aggregate statistic.

GDP is a measure of the size of an economy. It tells us the total amount of stuff the economy produces. Any change in the demand for domestic goods leads to change in national income of the country. Also, changes in foreign exchange rate affects trading relation between countries.

5. What will be the likely impact of increase in exports on balance of trade?

- (a) Improve
- (b) Deteriorate
- (c) No change
- (d) Cannot be predicted

6. **Assertion(A):** Improvement in balance of payments has an incremental impact on the national income of a period.

**Reason(R):** Inflow of foreign exchange in the domestic country is caused by changing rate of returns around the globe.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

- (c) A is correct but R is wrong.
- (d) Both are wrong.
#### Chapter- Indian Economy on the eve of Independence

- 1. British enabled India to be an importer of raw materials and exporter of finished goods.
  - (a) True
  - (b) False
  - (c) Partially true
  - (d) Partially false
- 2. Life expectancy during British India was \_\_\_\_.
  - (a) 66 years
  - (b) 70 years
  - (c) 44 years
  - (d) 50 years

3. Assertion(A): India developed a sound industrial base during the colonial rule.

**Reason(R):** The industrial sector was crying for modernisation, diversification, capacity building and increased public investment.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. **Assertion(A):** Railways brought a significant change in the structure of Indian Economy.

**Reason(R):** It enabled people to break geographical and cultural barriers and promoted commercialisation of agriculture.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

The restrictive policies of commodity production, trade and tariff pursued by the colonial government advsrsely affected the structure, composition and volume of India's foreign trade. Consequently, India became an exporter of primary products and an importer of finished

consumer and capital goods. The most important characteristic of India's foreign trade throughout the colonial period was the generation of large export surplus.

Due to its quality, Indian indigo was in great demand in Britain. In 1810, almost 95% of the indigo imported in Britain was from India. Indigo production became a very profitable business and many Britishers became indigo planters. They advanced loans to peasants at high rate and forced them to cultivate indigo in 25% of their land. They paid a low price for the indigo. As the indigo plant had deep roots, it exhausted the soil fertility and the land becane unfit for rice cultivation.

5. What was the treatment given by the indigo planters to the peasants?

- (a) They were paid low prices for going indigo
- (b) They were given support measures and how to grow indigo along with a piece of a land
- (c) Advancement of loans at a lower rate of interest
- (d) Peasants voluntarily agreed with the indigo planters to produce indigo

6. **Assertion(A):** India's foreign trade maintained an export surplus throughout the colonial period but it did not benefit the domestic economy.

**Reason(R):** The export surplus was used to meet the war expenses incurred by colonial setup and to import invisible items.

Options:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) Both are wrong.

#### Chapter- Indian Economy (1950-1990)

1. Match the columns and select the correct combination:

Column I	Column II
A.1955	i. Setting up of Planning Commission
B.Tariff	ii. Protection from trade
C.Green	iii. Wheat and Rice

Revolution	
D.1950	iv. Committee for small scale industries

Options:

- (a) A-i, B-ii, C-iii, D-iv
- (b) A-iv, B-ii, C-iii, D-i
- (c) A-ii, B-iii, C-i, D-iv
- (d) A-iv, B-ii, C-i, D-iii

2. Protection from foreign competition enabled the establishment of which particular indegenous industry?

- (a) Electronics and petrochemicals
- (b) Electronics and telecommunications
- (c) Electronics and automobiles
- (d) Electronics and chemicals

3. **Assertion(A):** The major policy initiatives i.e. land reforms and green revolution helped India to become self sufficient in food grains production.

Reason(R): The proportion of people depending on agriculture did not decline as expected.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. **Assertion(A):** It was necessary to bring balanced regional development in the context of Industrial development.

**Reason(R):** Government provided tax sops and introduced licensing policy in the Industrial Policy Resolution, 1956.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

During the colonial rule, there was neither growth nor equity in the agricultural sector. The policy makers of independent India had to address these issues which they did through land reforms and promoting the use of high yielding variety (HYV) seeds which ushered in a revolution in Indian Agriculture.

The stagnation in agriculture during the colonial rule was permanently broken by the green revolution. This refers to the large increase in production of food grains resulting from the use of HYV seeds, especially for wheat and rice. The use of these seeds required the use of these seeds required the use of fertiliser and pesticide in correct quantities as well as regular supply of water. Also, the application of these inputs in correct proportions is vital. The spread of green revolution technology enabled India to achieve self sufficiency in food grains and we no longer had to be at the mercy of America, or any other nation, for meeting our nation's food requirements. Thus, land reform measures along with green revolution promoted equity in the agriculture sector.

5. Which among the following crops chiefly benefitted as a result of green revolution?

- (a) Rice and Maize
- (b) Wheat and Sugarcane
- (c) Wheat and Rice
- (d) Rice and Sugarcane

6. There had been a significant decline in the prices of foodgrains in comparison to other items of consumption as a result of green revolution. The given statement is:

- (a) True
- (b) False
- (c) Partially false
- (d) Cannot say

#### Chapter- Liberalisation, Privatisation, Globalisation (LPG) Policy

- 1. \_\_\_\_\_ was the Indian Finance Minister in 1991, acknowledged for his capabilities to steer away the economic crisis looming large on the erstwhile Indian Economy.
  - (a) Dr. Subramanian Swamy
  - (b) Dr. Manmohan Singh
  - (c) Pranab Mukherjee
  - (d) Dr. Urjit Patel
- 2. \_\_\_\_\_ regulates the financial markets in the context of India.
  - (a) Securities and Exchange Board of India (SEBI)
  - (b) Reserve Bank of India
  - (c) Competition Commission of India (CCI)

(d) Federation of Indian Chambers of Commerce and Industry

3.**Assertion(A):** There has been a structural shift in the role of the RBI from regulator to facilitator of the financial sector.

Reason(R): Financial sector has to consult RBI before taking any decision.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. **Assertion(A):** In order to manage the crisis, India approached IMF and World Bank which granted \$7 billion as a loan.

**Reason(R):** Foreign exchange reserves declined to its lowest level with a reluctance from other countries to lend to India.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

**Direction:** Read the following case study and answer the questions that follow:

The process of globalisation through liberalisation and privatisation policies has produced positive as well as negative results both for India and other countries. In the Indian context, some studies have stated that the crisis that erupted in the early 1990s was basically an outcome of the deep rooted inequalities in Indian society and the economic reform policies initiated as a response to the crisis by the government, with externally advised policy packages, further aggravated the inequalities.

The New Economic Policy 1991 has increased the income and quality of consumption of only high income groups and the growth has been concentrated only in some select areas in the service sector such as telecommunications, information technology, finance, entertainment, travel and hospitality services, real estate and trade, rather than vital sectors such as agriculture and industry which provide livelihoods to millions of people in the country.

5. Economic reforms achieved the planning objective of growth with equity. The given statement is:

- (a) True
- (b) False
- (c) Partially true
- (d) Cannot say

6. Which of the following factors is incorrect with regard to the growth of the service sector during the reform period?

- (a) Availability of cheap and skilled labour
- (b) Growth of IT sector and spillover effects on the use of internet, telecommunications, mobile phones etc
- (c) Huge inflow of foreign capital and investments
- (d) Increased tax rates on foreign investments with no tax holidays

#### Chapter- Poverty

- 1. \_\_\_\_\_ scheme started in 1993 to create self employment opportunities for educated unemployed youth in rural areas and small towns.
  - (a) National Rural Employment Guarantee Act
  - (b) Prime Minister Rozgar Yojna
  - (c) Swarnjayanti Gram Swarozgar Yojna
  - (d) National Rural Livelihood Mission
- 2. The major reason for fixing higher calorie intake for rural people is/are:
  - (a) They are lethargic and thus require higher calorie intake
  - (b) They do more physical work than urban worker thus require higher calorie
  - (c) Both (a) and (b)
  - (d) None of the above

3. **Assertion(A):** Calorie based norm is not adequate to identify the poor.

**Reason(R):** It groups all the poor together and does not differentiate between the very poor and other poor.

Options:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) A is wrong but R is correct.

4. **Assertion(A):** The main goal of planning in India is to promote rapid and balanced economic development with equality and social justice.

**Reason(R):** Poverty alleviation and rural unemployment are regarded as the major hindrances towards the development of India.

Options:

- (a) Both A and R are true and R is the correct explanation of A.
- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) A is wrong but R is correct.

#### **Direction:** Read the given case study and answer the questions that follow:

Mohan is an agricultural seasonal labourer who lives in a small rural area of Uttar Pradesh. His monthly per capita expenditure is ₹850 per month, when he works on an agricultural farm. He depends upon his employer, the landowner for credit who charges an interest rate of 10% a month. Mohan repays the money by working physically for the landowner on his farmland.

At other times, he does odd jobs in the town. There are several months in a year when he has no work and thus even his basic needs are not met and needs credit to meet his daily expenses. During such times, his monthly per capita expenditure barely touches ₹350 per month.

5. Over the years his debt will:

- (a) Increase- because of increasing interest and non repayment of monthly amount
- (b) Remain constant- as he is working for the employer but is repaying less
- (c) Reduce- as amount equivalent to his salary is being counted as monthly repayment
- (d) Be totally repaid- as he is repaying the debt in the form of physical labour

6. Mohan falls under the category of \_\_\_\_\_.

- (a) Chronic poor
- (b) Churning poor
- (c) Transient poor
- (d) Non poor

#### Chapter- Human Capital Formation in India

- 1. Human capital brings about quantitative improvement in the labour force. The given statement is:
  - (a) True
  - (b) False
  - (c) Partially true
  - (d) Cannot comment
- 2. People as a resource means \_\_\_\_\_.

- (a) Country's natural capital in terms of their existing productive skills
- (b) Country's human capital in terms of their existing productive skills
- (c) Country's overall capital in terms of their existing productive skills
- (d) Country's technical capital in terms of their existing productive skills

3. **Assertion(A):** High level of human capital implies not only high earning potential but also a change in social and economic outlook.

**Reason(R):** It transforms the way of thinking and allows an individual to make well-informed and rational decisions.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. Assertion(A): Education is a wider concept and encompasses literacy.

**Reason(R):** A person is considered literate if he/she has the ability to read and write in any language but a person is educated if he/she can find a work and earns some income.

Options:

(a) Both A and R are true and R is the correct explanation of A.

- (b) Both A and R are correct but R is not the correct explanation of A.
- (c) A is correct but R is wrong.
- (d) A is wrong but R is correct.

#### Direction: Read the given case study and answer the questions that follow:

Both the forms of capital formation are the outcomes of conscious investment decisions. Decision regarding investment in physical capital is taken on the basis of one's knowledge in this regard. The entrepreneur possesses knowledge to calculate the expected rates of return to a range of investments and then rationally decides which one of the investments should be made. The ownership of physical capital is the outcome of the conscious decision of the ownerthe physical capital formation is mainly an economic and technical process.

Human capital formation takes place in one's life when she/he is unable to decide whether it would maximize her/his earnings. Children are given different types of school education and healthcare facilities by their parents and the society. Moreover, the human capital formation at this stage is dependent upon the already formed human capital at the school level. Human

capital formation is partly a social process and partly a conscious decision of the possessor of human capital.

5. Which of the following does not correctly differentiate between the physical and human capital?

- (a) Human capital is intangible whereas physical capital is tangible
- (b) Human capital can cope up with the changing technology whereas physical capital cannot
- (c) Human capital generates both personal and social benefits whereas physical capital only generates personal benefit
- (d) Human capital gets obsolete with time whereas physical capital does not

6. In the context of the paragraph, it can be argued that human capital depreciates faster than physical capital. The given statement is:

- (a) True
- (b) False
- (c) Partially true
- (d) Cannot comment

#### Chapter- Rural Development in India

- 1. The major reason for the decline in the productivity of agriculture post economic reforms period consider:
  - (a) Low level of investment by the public sector
  - (b) Lack of proper infrastructural support
  - (c) Casualisation of employment opportunities
  - (d) All of the above
- 2. Which of the following is an advantage of the institutional source of credit?
  - (a) Easier procedure
  - (b) Available even for unproductive purposes
  - (c) Lower rates of interest
  - (d) Timely flow of credit

3. **Assertion(A):** Agricultural diversification implies diversification of crop production and shifting of workforce to other allied activities such as livestock, poultry etc.

**Reason(R):** Most of the agricultural employment activities are concentrated in kharif season while during rabi season it becomes difficult to find gainful employment opportunities due to lack of irrigation facilities.

Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

4. Assertion(A): Credit is one of the major components which contributes to rural development.

**Reason(R):** There is a long gap between crop sowing and realisation of income and farmers need money to meet initial investments on seeds, fertilisers, implements etc.

#### Options:

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are correct but R is not the correct explanation of A.

(c) A is correct but R is wrong.

(d) A is wrong but R is correct.

#### Direction: Read the given case study and answer the questions that follow:

India's Micro, Small and Medium Enterprises (MSME) sector is poised for a mega transformation in 2020, with the launch of an Alibaba-like e-market place, trendy yet affordable khadi products to appeal to the masses and digital data-based credit ratings to help entrepreneurs avail loans. However, the MSME sector, often considered the bulwark of the economy as it contributes around 29% to the GDP and 48% to the Indian exports.

There is an urgent need of major reforms and policy interventions towards ensuring timely availability of low cost credit, improving ease of doing business and technological upgradation, to take on the formidable challenge of creating millions of jobs, ensuring equitable distribution of national income and achieving large scale import substitution. The World Bank has recently approved loan worth \$750 million to address the immediate liquidity and credit needs of India's MSME sector that has been severely impacted by the covid-19 crisis. This will give a push to Atma Nirbhar Bharat vision of the government.

5. Identify which of the following is not an advantage of the MSME sector?

- (a) It is suited for the utilisation of local resources
- (b) It is helpful in creation of employment opportunities
- (c) It requires more capital than labour
- (d) It ensures equitable distribution of income in the country
- 6. MSME sector suffered to a large extent in covid-19 pandemic situation due to \_\_\_\_\_.
  - (a) Liquidity crunch
  - (b) Lack of availability of digitalised data
  - (c) Lack of availability of labour

(d) All of the above

Class 12 Sample paper-5

Sub :History

# **GENERAL INSTRUCTION:**

- a) The paper has been divided into four sections A, B, C and D.
- b) Section A contains 24 questions. Attempt any 20 questions.
- c) Section B contains 22 questions. Attempt any 18 questions.
- d) Section C contains two Case based questions with 12 questions. Attempt any 10 questions.
- e) Section D contains 59 & 60 which are map based questions. Both the questions have to be attempted.

	1	<u>SECT</u>	IUNA		
		QUEST	IONS		
1	Composer of Prayaga Pra	ıshasti —			
	(A) Harisena	(B) Kalidas	(C) Shudraka	(D) Kabir	
2	The people of Harappa w	ere not aware of which	of the following metals?		
	(A) Gold	(B) Silver	(C) Copper	(D) Iron	
3	Who wrote 'The Story of	Indian Archaeology'?			
	(A) REM Wheeler	(B) SN Roy	(C) John Marshall	(D) RD	
	Bannerjee				
4	Terracotta Model of plou	gh has been found at _	•		
	(A) Banawali	(B) Dholavira	(C) Harappa	(D) Lothal	
5	Which was not a part of T	<b>Familakam?</b>			
	(A) Chalukya	(B) Chera	(C) Chola	(D) Pandya	
6	Which of these was not w	orshipped by the Hara	ppan?		
	(A) Nature	(B) Goddess	(C) Indra	(D) Pashupatinath	
7	Which was not a provinci	al centre in Mauryan I	Empire –		
	(A) Taxila	(B) Ujjayini	(C) Sanchi	(D) Tosali	
8	Silpaddikaram was writte	en in –			
	(A) Kannad	(B) Tamil	(C) Sanskrit	(D) Persian	
9	Project of scholarship to	prepare critical edition	of Mahabharata was begu	n in –	
	(A) 1918	(B)1919	(C) 1920	(D) 1921	
10	refers to a mai	rriage within unit –			
	(A) Exogamy	(B) Endogamy	(C) Polygyny	(D) Polyandry	
11	Who wrote – "Untouchables had to sound a clapper in streets to alert peopleyhen they				
	came"?			-	
	(A) Abdur Rajjak	(B) Xuan Zang	(C) Megasthanese	(D) Fa Xian	
12	Who was the writer of mr	richchakatika?			
	(A) Harishena	(B) Chanakya	(C) Amir Khushro	(D) Shudraka	
13	Buddhist Debates took pla	ace in –			
	(A) Kutagarashala	(B) Vihar	(C) Khanqah	(D) Chaitya	
14	Mahavira was preceded b	yother tirthank	aras.		
	(A) 21	(B) 22	(C) 23	(D) 24	
15	According to	Asoka distributed	portions of Buddha's relics	every	
	to important city and mad	le stupas over them.	-		
	(A) Ashokavadana	(B)Mahaparinibbana Su	tta (C) Vinaya Pitka	(D) Mahavansha	
16	Stupa Shah-ji-ki-dheri wa	as in –			
	(A) Sanchi	(B) Bharhut	(C) Amaravati	(D) Peshawar	
17	Which was not a principa	l deity of vedic panthe	on –		
	(A)Agni	(B) Shiva	(C) Indra	(D) Soma	
18	Temples of Chidambaran	n, Thanjavur and Gang	gaikondacholapuram were i	made by	
	(A) Satavahana	(B) Gupta	(C) Chola	(D) Chera	

19	Who was known as 'Gharib Nawaz'?	
	(A) Khwaja Muinuddin (B) Nizamuddin Aulia (C) Qutbuddin Kaki (D) None	
20	In Guru Granth Sahib, whose hymns were not compiled –	
	(A) Kabir (B) Raidas (C) Baba Farid (D) Mira	
21	The first Surveyor General of India was –	
	(A) Jhon Marshall (B) Colin Mackenzie (C) Cunningham (D) RD	
	Banarjee	
22	Who was given the title of 'Establisher of Yavana Kingdom'? (A)	
	Ramaraya (B) Krishnadeva (C) Gajapati Ruler (D) Babur	
23	Rakshasi-Tangadi war was fought in –	
	(A) 1565 (B) 1566 (C) 1567 (D) 1568	
24	Vijayanagar Rayas were also known as –	
	(A) Ashwapati (B) Gajapati (C) Narapati (D) Pashupati	
	<u>SECTION B</u>	•
25	ASSERTION(A): Amara Nayakas sent tribute to Rayas.	
	<b>REASON(R):</b> It expressed their loyalty to Rayas.	
	(A) Both (A) and (R) are correct, (R) is correct explanation of (A).	
	(B) Both (A) and (R) are correct, (R) is not correct explanation of (A).	
	(C) (A) is correct but (R) is wrong.	
	(D) (A) is wrong but (R) is correct.	
26	ASSERTION(A): Bhakti traditions are classified in two categories by historians of religion.	
	<b>REASON(R):</b> These are Alvars and Nayanars.	
	(A) Both (A) and (R) are correct, (R) is correct explanation of (A).	
	(B) Both (A) and (R) are correct, (R) is not correct explanation of (A).	
	(C) (A) is correct but (R) is wrong.	
	(D) (A) is wrong but (R) is correct.	
27	ASSERTION(A): Rice was not a part of Harappan's diet. REASON(R):	
	Finds of rice are rare.	
	(A) Both (A) and (R) are correct, (R) is correct explanation of (A).	
	(B) Both (A) and (R) are correct, (R) is not correct explanation of (A).	
	(C) (A) is correct but (R) is wrong. (D) (A) $= 1 + t$ (D)	
• •	(D) (A) is wrong but (R) is correct.	
28	<b>ASSERTION(A):</b> Epigraphy provides a full understanding of political and economic history.	
	<b>REASON(R):</b> Historians have to make other assessments as well. (A) Both (A) and (B) are connect. (B) is connect complemential of (A)	
	(A) Both (A) and (B) are correct, (B) is not correct explanation of (A). (B) Both (A) and (B) are correct. (B) is not correct explanation of (A).	
	( <b>b</b> ) Both ( <b>A</b> ) and ( <b>R</b> ) are connect, ( <b>R</b> ) is not connect explanation of ( <b>A</b> ). ( <b>C</b> ) ( <b>A</b> ) is correct but ( <b>B</b> ) is wrong	
	(D) (A) is wrong but (R) is correct	
20	(D) (A) is wrong but (A) is concet.	
49	ASSERTION(A). Golumi-pula Siri-Salakani claimed to have ensured that there was no	
	$\mathbf{RFASON}(\mathbf{R})$ . At the same time, be entered into a marriage alliance with the kin of Rudradaman	
	(A) Both (A) and (B) are correct (B) is correct explanation of (A)	
	(B) Both (A) and (R) are correct (R) is not correct explanation of (A).	
	(C) (A) is correct but (R) is wrong.	
	(D) (A) is wrong but (R) is correct.	
30	<b>ASSERTION(A):</b> According to Jainism. Asceticism and penance are reauired to free oneself from	
- •	the cycle of karma.	
	<b>REASON(R):</b> This can be achieved only by renouncing the world.	
	(A) Both (A) and (R) are correct, (R) is correct explanation of (A).	
	(B) Both (A) and (R) are correct, (R) is not correct explanation of (A).	
	(C) (A) is correct but (R) is wrong.	
	(D) (A) is wrong but (R) is correct.	

# **31**The correct chronicle order of the dynasties that ruled Vijayanagara empire is –<br/>(A) Saluva, Sangama, Tuluva, Aravidu(B) Sangama, Saluva, Aravidu, Tuluva<br/>(D) Aravidu, Tuluva, Saluva, Sangama

32	Major anthology of composition by Alvars was –												
	(A) A	muk	tamaly	yada			(B)	Vach	ana				
	(C) Nalayira Divyapraban				band	lhanm	(D)	Teva	ram				
33	Mate	h the	e follo	wing:									
	Sight					<b>Findings</b>							
	1. Ba	lakot				a. Water Reservoir							
	2. M	ohenjo	odaro			b. Citadel not walled of	f						
	3. Lo	thal				c. Priest King2							
	4. Dł	olavi	ra			d. Shell							
		1	2	3	4			1	2	3	4		
	(A)	а	b	с	d		(B)	d	с	b	а		
	(C)	с	а	b	d		(D)	b	d	а	с		
34	Mate	h the	follo	wing:				-			-		
• •	Dvna	sties				Features							
	1. Ki	shana	a			a. Most pure gold coins							
	2 Gr	nta	A			b firstly issued gold cold	ins						
	2. Ot 3. Inc	ipu 10-Gr	eeks			c copper coins	115						
	$\frac{3.1}{4}$ Va	udher	vas			d firstly used names an	d imao	es of	rulers	on co	inc		
	<b>ч.</b> 10	1	yas 7	3	4	d. mistry used names an	u iiiag	1,05 01	1uicis 2	3	1115 <b>A</b>		
	$(\Lambda)$	1	2 b	5	- d		$(\mathbf{R})$	L d	4	J h	<b>-</b>		
	$(\mathbf{A})$	a	0	L h	u d		$(\mathbf{D})$	u h	C O	d	a		
25	(D) Mate	L h tha	a follo	U	u		(D)	U	a	u	C		
35	I ist	11 UIE 1		wing:		List 2							
	$\frac{List}{1 V_{1}}$	<u>L</u> ahona	•			<u>List 2</u> a. Daggan Bulara							
		isnana also	1			a. Deccall Rulers							
	2. Sn	ака 11-				D. SON OF GOO							
	3. V8	Katak	a			c. Unique Branmana							
	4. Sa	tavan	ana	2	4	d. Miechchas		1	•	2	4		
	( • )	I	2	3	4			I	2	3	4		
	(A)	a	b	C 1	d		(B)	C 1	a	d	b		
26	(C)		C		a		(D)	b	d	а	С		
36	Mate	h the	e tollo	wing:		T • 4 A							
	List	L,	D' 1			List 2							
	1. V1	naya	Pitaka	L		a. Jainism stories							
	2. Su	tta Pi	taka		P	b. Philosophical matters							
	3. At	hidha	amma	c	. Bu	ddha's Teaching	6.0						
	4. Ut	taradi	nyayar	na Suti	ta	d. Rules – Regulations	of Sar	igha	•	•			
		I 1	2	3	4			l	2	3	4		
	(A)	b	d	C	a		(B)	d	C	b	a		
	$(\mathbf{C})$	C		<u>b</u>	a	1 (1)	(D)	а	b	<u>C</u>	d		
37	ASSI		UN(A)	): Acc	ordi	ng to the Shastras, only I	Shatri	yas ce	ould b	e king	s.	1	
	KEA	SON(	$\mathbf{K}$ ): $P$	olitica	l po	wer was effectively open	to any	one w	ho co	uld mi	ister su	pport and	
	resou	rces,	and r	arely a	lepe	nded on birth as a Kshat	riya.		<b>C</b> ( <b>A</b> )				
	(A)	Both	1 (A) 8	and ( <b>R</b>	) are	e correct, ( $\mathbf{K}$ ) is correct e	xplana	tion o	I (A).				
	(B)	Both	1 (A) 8	ana ( <b>R</b>	) are	e correct, ( <b>K</b> ) 1s not corre	ct expl	anatio	on of (	(A). (C	) <b>(A)</b> 1	S	
	corre	ct but	E ( <b>K</b> ) 19	s wron	lg.								
	(D) (	<b>A)</b> is	wrong	g but (l	<b>K)</b> 19	s correct							

38	Which is false statement –				
	(A) Omani copper and Harappan artefacts have traces of nickel	l, suggesting a common origin.			
	(B) Successful merchants were designated as masattuvan, setthis and satthavahas.				
	(C) Dayaram Sahani excavated Hastinapur in 1951-52. in Meerut.				
	(D) According to the Shastras, only Kshatriyas could be kings.				
39	The terms great and little traditions were coined by a social	logist named –			
0,	(A) Robert Redfield (B) Alexandre Cunningham (C	D H H Cole (D) S N Roy			
40	Vijavanagar Empire was founded in _				
-0	(A) 1333 (B) 1334 (C)	D) 1335 (D) 1336			
	(A) 1555 (D) 1554 (C)	(D) 1555			
<u>/1</u>	Match the following:				
41	List 1 List 2				
-	1 Andal a Buddhist Goddess				
	2 Karaikkal Ammaiyar b Baidas				
	2. Karahkar Animaryar D. Kaluas				
	4 Miro d Alwor				
	$\begin{array}{c} 4. \text{ Nilla} & \text{u. Alwal} \\ 1 & 2 & 3 & 4 \end{array}$	2 3 1			
	$ \begin{array}{c} 1 & 2 & 5 & 4 \\ \hline (\Lambda) & d & c & a & b \\ \end{array} $	2 <b>5 4</b>			
	$(A)  \mathbf{u}  \mathbf{c}  \mathbf{a}  \mathbf{b} \qquad (A)  \mathbf{c}  (A)  (A)  \mathbf{c}  (A)  (A)$				
42	(C) a u C U (D) u	a U C			
42	(A) Sultan Chivasuddin Khalii	all was-			
	(A) Suitaii Giilyasudulii Khaiji (D) Mulia.	Initiau Qashin nommod Din Tughlog			
12	(C) Quibudain Abek (D) Mur	nammad Bin Tugniaq			
43	After Talikota war, Aravidu rayas ruled their empire from				
-	I. Penukonda II. Chandragiri III. M	ladurai IV. Thanjavur			
	(A) I and II (B) II and III (C) II	II and IV (D) I and IV			
44	Sharia evolved from –				
-	I. Quran II. Hadis III. Qiyas IV. Ijn	na			
	(A) only I  (B) I, II  (C) I, II, III  (D) I, I	I, III and IV			
45	It may have been a council chamber, a place where the king	g met his advisers –			
	(A)Hazara Ram Temple (B) Lotus Mahal (C)Hous	se of Victory (D) None			
46	Which fact is false about Amara-Nayaka-				
	(A) Amara-Nayaka system was similar to Iqta System.				
	(B) Amara-Nayaka was military commander.				
	(C) They collected taxes and dues from peasants.				
	(D) They often moved from one area to another.				
	<u>SECTION C</u>				
	Read the following source carefully and answer the question	ons-			
	A large number of inscriptions of the kings of Vijayanagara ar	nd their nayakas recording donations			
	to temples as well as describing important events have been re	ecovered. Several travellers visited			
	the city and wrote about it. Notable among their accounts are t	those of an Italian trader named			
	Nicolo de Conti, an ambassador named Abdur Razzaq sent by	the ruler of Persia, a merchant			
	named Afanasii Nikitin from Russia, all of whom visited the c	city in the fifteenth century, and those			
	of Duarte Barbosa, Domingo Paes and Fernao Nuniz from Por	rtugal, who came in the sixteenth			
	century.				
47	Several travellers visited and wrote about city.				
	(A) Vijayanagara (B) Delhi (C) Awa	adh (D) Ajmer			
<b>48</b>	Ruler of Persia sent-				
	(A) Barbosa (B) Abdur Razzaq (C) Nu	niz (D) Paes			
<b>49</b>	Which traveller did not come in 16 <sup>th</sup> century-				
L	(A) Nuniz (B) Paes (C) Nik	citin (D) Barbosa			
50	Which traveller came in 15 <sup>th</sup> century –				
	(A) Nicolo de Conti (B) Paes (C) Nu	niz (D) Barbosa			

51	Duarte Barbosa came from –					
	(A) Italy	(B) Portugal	(C) Russia	L	(D) Spain	
52	Who noted "between th	e first, second and the th	ird walls ther	e are cultivate	d fields, gardens	
	and houses" –					
	(A) Barbosa	(B) Abdur Razzaq	(C) Paes		(D) Nuniz	
	Read the following sour	ce carefully and answer	the questions	-		
	An excerpt from Jahanara's biography of Shaikh Muinuddin Chishti, titled Munis al Arwah (The Confidant of Spirits)- After praising the one God this lowly faqira (humble soul) Jahanara went from the capital Agra in the company of my great father (Emperor Shah Jahan) towards the pure region of incomparable Ajmer I was committed to this idea, that every day in every station I would perform two cycles of optional prayer For several days I did not sleep on a leopard skin at night, I did not extend my feet in the direction of the blessed sanctuary of the revered saving master and I did not turn my back towards him. I passed the days beneath the trees					
53	Munis al Arwah was-					
	(C) Memoirs of Ajmer		(D)Biogr	aphy of Shah Ja	ahan	
54	The capital of Emperor S	Shah Jahan was-				
	(A) Ajmer	(B) Delhi	(C) Agra	([	D) None	
55	<b>Jahanara was-</b> (A) Daughter of Shaikh	(B) Daughter of Em	peror	(C) a beggar	(D) none	
56	Jahanara did not extend	his feet towards –				
	(A) Agra	(B) Ajmer	(C) Master's	s Shrine (D	) Shah Jahan	
57	The language of Munis a	l Arwah was-				
	(A) Persian	(B) Urdu	(C) Turkish	(D	) Hindi	
58	<b>'After praising the one G</b>	od' who is God here?				
	(A) Shaikh	(B) Shah Jahan	(C) Faqira	(D	0) Allah	
		<u>Sectio</u>	<u>n D</u>			

MAP BASED QUESTIONS



59	The sight A is –				
	(A) Amaravati	(B) Kashi	(C) Sanchi	(D) Koshal	
60	The sight B is- (A)				
	Dinajpur	(B) Patliputra	(C) Kalibangan	(D) Hampi	

-----XXXXX------

GENERAL INSTRUCTIONS: -

- 1. This paper consists of 10 pages and 60 questions.
- 2. The question paper has three sections as A, B & C.
- **3**. Section A has 24 questions, attempt any 20 questions.
- 4. Section B has 24 questions, attempt any 20 questions.
- 5. Section C has 12 questions, attempt any 10 questions.
- 6. There is only one correct option for every question. Marks will not be awarded for marking more than one option.
- 7. All questions carry equal marks. There is no negative marking.

#### Section A

#### Attempt any 20 questions

- Q1. Which set of the countries belonged to the NATO group? (a) United States and the Soviet Union (b) France and Germany. (c) India and Pakistan. (d) United Kingdom, France, West Germany Q2. Which among the following is not among the objectives of NAM? Enabling newly decolonized countries to pursue independent policies. Ι II Not to join any military alliances. III Following a policy of neutrality on Global issues. IV Focus on elimination of global economic inequalities Identify the correct option. (a) i & iii (b) I &ii (c) iii& iv (d) i,ii& iii Q3. When was NDC (National Development Council) set up? (b) 6 Dec 1952 (a) 6 Aug 1952 (c) 7 Aug 1952 (d) 10 June 1952 Q4. What was the final and most immediate cause of the disintegration of the USSR? (a) Gorbachev's policies (b) Western Developments. (c) Second world war. (d) The rise of Nationalism and the desire for sovereignty within various republics. Q5. NITI Aayog is also known as\_\_\_\_\_\_of Government. (a) Planning and Execution (b) Think Tank (c) Regional Council (d) Development commission Q6. Who were the three main leaders involved in the Cuban Missile crisis: (a) Nehru, Tito, Nasser (b) John .F.Knnedy, Nikita kruskev & Fidel castro (c) Tito.Nikita Kruskev & George W. Bush (d) Sukarno. Gorbachev & Fidel Castro. Q7. Where did Pakistan conduct its nuclear tests? (a) Patkai hills (b) Chagai hills (c) Naga hills (d) Kargil hills
  - Q 8. Which State was carved out of Assam from the following:

(a)	Meghalaya	(b) Sikkim	(c) Manipur	(d) Tripura
· /	0,			× / 1

- Q9. Which of the following statement is not correct about "India and the Cold War"?
  - (a) India took particular care in staying away from the two alliances.
  - (b) India's policy was neither negative nor passive.
  - (c) Indian diplomats and leaders has mediated the Cold War rivals. (d) India was not in favor of actively intervening in world affairs.

Q10.Arrange the following in the chronological order of their establishment:

- (i) World Bank (ii) WTO (iii) Formation of UNO (iv) IAERA
  - (a) iii, iv,i, ii (b) iii, ii, i,iv
  - (c) ii, iii, iv, i (d) i, iii, iv, ii

Q 11."The United Nations was not created to take humanity to the heaven, but to save it from the hell' Who made this statement?

(a) Pt. Jawaharlal Nehru	(b) Kofi Annan
(c) Ban Ki-Moon	(d) Dag Hammarskjold

Q12.India conducted series of nuclear tests at Pokhran in the year\_\_\_\_\_.

- a) June 1978
  - b) May 1998
  - c) April 1998
  - d) March1998.

#### Q13.The Arab Spring began with------

- a) Tunisia Revolution
- b) Russian Revolution.
- c) Egyptian Revolution
- d) Syrian Revolution.

Q14.The first Gulf war is known as -----.

- a) Operation Infinite Reach..
- b) Operation Enduring Freedom.
- c) Operation Desert Storm.
- d) Operation Iraqi freedom.

#### Q15.The three major objectives of Nehru's foreign policy were:

- i) To preserve the hard-earned sovereignty.
- ii) To protect territorial integrity.
- iii)To promote rapid economic development.
- iv)To establish a Capitalist System in India.

#### Select the correct answer given below:

- a) i, ii and iv only.
- b) ii, iii and iv only.
- c) i, ii and iii only.
- d) ii, iii and iv only.

#### Q16.When did India and China signed the Panchsheel agreement?

a) 24 April 1954

- b) 29 April 1954
- c) 30 April 1954
- d) 1 March 1959

Q17. Which of the following nuclear treaties were rejected by India?

- a) NPT & CTBT
- b) Kyoto Protocol
- c) Panchsheel
- d) None of the above.

# Q18.Which is known as the high point of Cold War?

- a) Cuban Missle crisis.
- b) Atomic bomb attack on Nagasaki.
- c) Establishment of SEATO and CENTO.
- d) Establishment of NATO..

Q19. Where is the head quarter of UNICEF?

- a) Tokyo
- b) Chicago
- c) Los Angles.
- d) New York.

Q 20. Choose the odd one out of the following statements.

- a) States Reorganization Act-1956
- b) India-Pakistan war-1965
- c) Independence of China-1949
- d) Formation of Bangladesh-1972

Q21.Pakistan faced the Bangladesh crisis during whose military rule?

- a) General Zia-ul-Haq.
- b) General Ayub Khan..
- c) General Yahya Khan..
- d) General Parvez Musharraf

Q22.Name the organization which came into being in replacing GATT.

- a) IMF
- b) World Trade Organization.
- c) World Bank.
- d) UNICEF.

Q23.Which one of the following statements is false .:-

- a) The Nizam of Hyderabad was keen to have an independent status for the state of Hyderabad.
- b) Jammu and Kashmir was ready to sign the Instrument of Accession.
- c) The issue of Junagarh was resolved after a plebiscite in the state.
- d) Travancore was not the first Indian State to merge into the Union of India.

Q24.Which one of the following statement is false:

- a) Some of the princely states clearly wanted to become part of the Indian Union.
- b) The Indian government was ready to give autonomy to some regions.
- c) The ruler of Junagadh had decided not be an independent state and be part of independent India.

d) Princely state covered one third of the land area of the British Indian Empire.

# Section B

# Attempt any 20 Questions

Q25.The Cold War is referred to the competition, tensions and a series of confrontations between the:

- a) United States and the Soviet Union
- b) France and Germany
- c) India and Pakistan
- d) America and Africa

Q26.What was called the largest garage sale in history?

- a) All agricultural land was sold at throwaway prices.
- b) The devaluation of the ruble in front of the dollar.
- c) All garbage's were sold at very good prices.
- d) Valuable industries were undervalued and sold at throwaway prices.

Select the correct answer using the force given below: i) a and c only ii) b and c only iii) a and d only

iv) b and d only

Q27.Since the Nagpur session of the Congress in 1920, this principle was accepted that the reorganization of states would be on a linguistic basis. Despite this, the leaders were against it after independence because---

i) Things change after independence and partition.

ii) Might lead to disruption and disintegration. iii)To adopt a mixed economy.

iv)To adopt a planned economy.

Select the correct answer using the force given below:

a) ii and iv only.

- b) iii and iv only.
- c) i and ii only.
- d) i and iii only.

Q28.In which year CENTO was established?

- a) 1956
- b) 1957
- c) 1958
- d) 1955

Q29.Sardar Vallabhbhai Patel was entrusted with the task of unification of the princely states. Which of the following argument is not correct?

- a) He had a long political experience.
- b) He was a visionary and a good speaker.

- c) Muslim League wanted that the task of integration should be entrusted to Sardar Vallabbhai Patel.
- d) He was the Home Minister as well as the Minister of Concession Department.

Q30.India signed 20 years treaty with which country after 1971 war?

- a) USA.
- b) France.
- c) USSR.
- d) Germany.

Q31.NITI Aayog was set up.

- a) To bring more accuracy in the development
- b) Because people had expectations for growth and development in the administration through their participation.
- c) So that departments could be included in Planning Commission. d) All the above.

Q32.Which one of the following was Not an outcome of 'Shock Therapy'?

- a) The old system of social welfare got destroyed.
- b) Industries were put up for sale to the private sector.
- c) The value of the Russian currency, the 'Ruble' rose dramatically.
- d) Russia started to import food grains.

Q33.**Assertion:** The Cold War was not simply a matter of power rivalries, of military alliances, and of the balance of power.

**Reason:** These were accompanied by a real ideological conflict as well, a difference over the best and the most appropriate way of organizing political, economics, and social life all over the world.

a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.

- b) Both the Assertion and the Reason are correct but the Reason is not the correct
- c) The Assertion is incorrect but the Reason is correct.
- d) The Assertion is correct but the Reason is incorrect.

Q34.Which operation is known as "Operation Iraqi Freedom"?

- a) US attack on Iraq in 2003.
- b) US attack on Iraq in 1991.
- c) US attack on Afghanistan.
- d) None of the above.
- Q35. Arab Spring was\_\_\_\_\_movement
  - a) Political movement.
  - b) Socialist movement.
  - c) Cultural movement.
  - d) Economic movement.

Q36. NITI Aayog serves as a think-tank to promote \_\_\_\_\_\_ federation where government acts as a \_\_\_\_\_\_ with the help of technology. Select the correct option. a) Competitive, controller

- b) Comparative, central authority
- c) Cooperative, facilitator
- d) Correlated, enabler
- Q37.Which apex body is responsible for decision making and deliberations on development matters in India?

- a) Finance Ministry
- b) NITI Aayog.
- c) The National development Council.
- d) None of the above.

Q38.What is the objective of UN?

- a) To prevent international conflict and facilitate co-operation among states.
- b) To boost the trade among the member nations.
- c) To procure the best medical help during the time of pandemic.
- d) All of the above..

Q39.Assertion: Huge stocks of arms were considered necessary to prevent wars from taking place. **Reason:**Since the cold war did not eliminate rivalries between the two alliances, mutual suspicions led them to arm themselves to the teeth and to constantly prepare for war.

- a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- b) Both the Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is incorrect but the Reason is correct.
- d) The Assertion is correct but the Reason is incorrect.

Q40.Assertion: The UN is an imperfect body, but with out it the world would be worse off.

**Reason:** Given the growing connections and links between societies and issues-What we often call

- 'interdependence'-it is hard to imagine how more than seven billion people would live together without an organization such as the UN.
- a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
- b) Both the Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is incorrect but the Reason is correct.
- d) The Assertion is correct but the Reason is incorrect.
- Q41,Assertion:Despite India's wish to be a permanent veto-wielding member of the UN,some countries questions its inclusion..
  - **Reason:** Neighbouring Pakistan, with which India has troubled relations, is not the only country that is reluctant to see India become a permanent veto member of the Security Council..
  - a) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.
  - b) Both the Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.
  - c) The Assertion is incorrect but the Reason is correct.
  - d) The Assertion is correct but the Reason is incorrect.

Q42.Assertion: Gorbachev did nothing to save the disintegration of Soviet System..

- **Reason:** These developments were accompanied by a rapidly escalating crisis within the USSR that hastened its disintegration.
  - (a) Both the Assertion and the Reason are true and the Reason is the correct explanation of the Assertion.
  - (b) Both the Assertion and the Reason are true, but the Reason is not the correct explanation of the Assertion.
  - (c) The Assertion is true, but the Reason is false.

(d) The Assertion is false, but the Reason is true.

Q43.Choose the number of incorrect argument/arguments as far the objectives of WHO is concerned.

i)It plays an essential role in the global governance of health and disease. ii) Its core value is to coordinate multiple actors towards common goals..

iii) It plays important role to stop conflicts among the Nations.

- iv) It is only solving the problems of axis countries.i is incorrect.
- a) ii and iii are incorrect.
- b) ii, iii and iv are incorrect.
- c) All are incorrect.
- d) iii &iv are incorrect.

Q44. Assertion: NITI Aayog is a non-constitutional body.

Reason: The Chief Minister of India is the Ex- Officio Chairman of NITI Aayog.

- a) Both the Assertion and the Reason are true and the Reason is the correct explanation of the Assertion.
- b) Both the Assertion and the Reason are true, but the Reason is not the correct explanation of the Assertion.
- c) The Assertion is true, but the Reason is false.
- d) The Assertion is false, but the Reason is true.

Q45. \_\_\_\_\_draws the global media's attention to human rights abuse.

- a) Human Right Power
- b) Human Right Watch
- c) Human Rights People
- d) Human Right Torch

Q46.The re-organization of the states on the basis of language had a negative effect:

- a) The concept of power sharing was realized.
- b) The principle of variation was accepted.
- c) A uniform basis was found for the demarcation of the states.
- d) Movements started in many areas of the country demanding the formation of small separate states.
- Q47.During the Nehru era, why did some political parties and groups in our country believe that India should be more friendly with the bloc led by the US?
  - a) Because the US bloc claimed to be pro-democratic and promoted Capitalism.
  - b) The US always favored India.
  - c) The US supported India in all its policies.
  - d) The US was very close to India.

Q48.Which institution became the successor of the League of Nations?

- a) WHO
- b) UNICEF
- c) UNO
- d) SAARC.

Q49.Which one of the following statement related to the Iraq invasion by the US is incorrect?

- a) More than forty other countries were involved in this invasion.
- b) The UN had given consent to invade Iraq.

- c) The invasion was to prevent Iraq from developing weapons of mass destruction.
- d) The US lost over 3000 military personnel in this war.

# Section C

#### Attempt any 10 questions.

Q.50 Study the picture given below and answer the question that follows:



The ruler belonged to which state:

- a) Sikkim
- b) Manipur
- c) Assam
- d) Tripura

Q51.Study the picture given below and answer the question that follows:



What does this logo symbolise?

a)	Global progress	c) Equity in the world
b)	World peace	d) Atoms for peace

Q52.Study the cartoon given below and answer the question that follows:



The message that this picture gives is

- a) UNO is an imperfect body.
- b) UNO plays an important role in solving international problems
- c) It is showing the difficult role played by Secretary General of UNO..
- d) It shows the military use of Secretary General.

Read the given passage carefully and answer the questions that follow :

The partition was not merely a division of properties, liabilities and assets, or a political division of the country and the administrative apparatus, What also got divided were the financial assets, and things like tables, chairs, type writers, paper-clips, books and also musical instruments of the police band! The employees of the government and the railways were also divided.

Q.53.Who did not believe in "Two-Nation Theory"?

- a) The leaders of the Indian National Congress
- b) People of Pakistan.
- c) Muslim league.
- d) All the above.

Q54.What major difficulty/difficulties arose in the way of partition?

- a) There was no single belt of Muslim majority areas in British India.
- b) All Muslim majority areas did not want to be in Pakistan.
- c) Neither (a) nor (b).
- d) Both (a) and (b).

Q55.What would have been India's position in the world, had there been no partition of India?

- i) India would have been a much larger nation in terms of territorial area.
- ii) India would have played a more vital role in the world scenario. a) (i) is correct.
  - b) (ii) is correct.
  - c) Both are correct
  - d) Both are incorrect.

Q56.What led to the decision for the creation of Pakistan? Choose the incorrect statement as the reason

- a) Political competition between Muslim League and Congress.
- b) Several political developments in 1940's.
- c) Role played by the British.
- d) Failure of the Interim Government.

Read the given passage carefully and answer the questions that follows;

The first Prime Minister, Jawahar Lal Nehru played a crucial role in setting the national agenda. He was his own Foreign Minister. Thus, both as the Prime Minister and the Foreign Minister, he exercised profound influence in the formulation and implementation of India; s foreign policy from 1946 to 1964. The three major objectives of Nehru's foreign policy were to preserve the hard-earned sovereignty' protect territorial integrity' and promote rapid economic development.

Q57.Who was the foreign minister during the time of Pt.Nehru?

- a) Atal Bihari Vajpayee..
- b) Sardar Patel.
- c) Nehru himself.
- d) Jay Prakash Narayan.

Q58.Why J.C Kumrappa supported the plan of industrialization of rural areas? a) For the ground level development.

- b) To help the poor.
- c) To escape the vicious circle of poverty.
- d) To boost up the economy

Q59.Who drafted the second five year plan?

- a) Dr Bhimrao Ambedkar.
- b) P.C Mahalanobis..
- c) Moraji Desai.
- d) Pt.Jawaharlal Nehru

Q 60. What is India's Nuclear policy?

- a) Use it for Military purposes.
- b) No first use.
- c) Use it not for peaceful purposes.
- d) To make alliances with countries having Nuclear weapons.

#### Sample question paper

#### Sociology

- 1. Which among the following is not the use of demographic data?
  - A. Economic development
  - B. Planning of policies
  - C. Implementation of policies
  - D. Private welfare
- 2. The theory of population growth was written in
  - A. The sociological analysis of population
  - B. The Essay on population
  - C. Sociology and population
  - D. Indian civil service
- 3. The second stage of demographic transition is called
  - A. Population explosion
  - B. Life expectancy
  - C. Transitional stage
  - D. Replacement level
- 4. The growth rate is the difference between
  - A. Immigration and emigration rates
  - B. Birth and deaths
  - C. Fertility and Fecundity
  - D. None of the above
- 5. Which states in India are near the replacement levels of population growth?
  - A. Haryana
  - B. Kerela
  - C. Chandigarh
  - D. Punjab
- 6. Dependent's comprise of
  - A. Young people below 15
  - B. Old people above 65
  - C. Infants and 70 plus old people
  - D. Both A and C
- 7. Whenever there is a bulge in the age group pyramid amongst the non dependant age group,
  - the \_\_\_\_\_ is beneficial
    - A. Economic stability
    - B. Demographic dividend
    - C. Population planning
    - D. Census
- 8. The first national family planning policy Was announced in
  - A. 1949
  - B. 1952
  - С. 1975
  - D. 1959
- 9. According to Thomas Robert Malthus, humanity is condemned to live in poverty forever because the growth of \_\_\_\_\_will always be overtaken by population growth. While population

rises in geometric progression agricultural production can only grow in arithmetic progression.

- A. Agricultural production
- B. Financial investment
- C. Industrial production
- D. Social movements
- 10. In the theory of demographic transition, there are three basic phases of population growth. the first stage is that of\_\_\_\_\_ In a society that is underdeveloped and technologically backward. Growth rates are low, because both the death rate and the birth rate are very high, so that the difference between the two is low.
  - A. High population growth
  - B. Low population growth
  - C. Medium population growth
  - D. Population loss
- 11. \_\_\_\_\_ Is a term for science dealing with the sex, distribution, composition and Changes in population.
- 12. The term demography is of Greek origin and is composed of two words dimas and graphene implying \_\_\_\_\_
- 13. According to Robert malthus, population rises in \_\_\_\_\_ Proggression whereas agricultural production grows in \_\_\_\_\_ progress.
- 14. the total number of live births in a particular area during a specified period Divided by the total population of that area in thousands. the phenomenon is referred to as \_\_\_\_\_
- 15. \_\_\_\_\_ state has the lowest child sex ratio.
- 16. \_\_\_\_\_ State has the highest fertility rate.
- 17. Sikkim has the sex ratio \_\_\_\_\_
- 18. Demography means \_\_\_\_\_
- *19. The theory of population growth was coined by* 
  - A. Malthus
  - B. Karl Marx
  - C. Max Weber
  - D. M N Srinivas
- 20. The number of deaths birth 1000 population is known as
  - A. Birth rate
  - B. Death rate
  - C. Sex ratio
  - D. Maternal mortality rate
- 21. Castes Are not only unequal to each other in ritual terms, they are also supposed to be
- 22. During the 1960s scholars debated whether tribes should be seen as \_\_\_\_\_
- 23. The family is linked to the \_\_\_\_
- 24. Consumption patterns express \_\_\_\_\_ Of the individual or group
  - A. Commodification
  - B. Lifestyle
  - C. Unity
  - D. Company
- 25. The weekly market system off dhorai symbolises
  - A. Social hierarchy

- B. Position in the cast
- C. Social distance
- D. All of the above
- 26. The era when India became more fully linked two the world market was
  - A. Post vedic
  - B. Precolonial
  - C. Colonial
  - D. Post colonial
- 27. The term caste In the Indian context comprises of
  - A. Tribes
  - B. Varna
  - C. Jati
  - D. Both b and c
- 28. Which of the following is true for caste
  - A. It is a choice
  - B. It is endogamous
  - C. It is not linked to occupation
  - D. It is based on egalitarianism
- 29. \_\_\_\_\_ Passed a law that recognised SCs and STs
  - A. The untouchability offences act of 1955
  - B. The Government of India act 1935
  - C. The schedule cast act 1989
  - D. The schedule tribe Act 2005
- 30. The concept of Sanskritization and dominant cast as processes of change was coined by
  - A. Jyotiba Phule
  - B. Periyar
  - C. M N Srinivas
  - D. D Ayankkali
- 31. The tribal language spoken by Indian tribes does not include
  - A. Indo Aryan
  - B. Zulu
  - C. Austric
  - D. Tibeto-Burman
- 32. Which of the following tribe have turned into settled agriculture
  - A. Birhores
  - B. Santhal
  - C. Hos
  - D. Gonds
- 33. The adivasis traded
  - A. Salt
  - B. Forest produce
  - C. Elephants
  - D. All of these
- 34. The matrilineal system has inherent disagreements based on
  - A. Women are deprived power
  - B. Structure of authority
  - C. Leniency towards men
  - D. All of these

- 35. The hierarchal ordering of castes is based on the distinction between \_\_\_\_\_
- 36. \_\_\_\_\_ Devoted his or her life 2 educate shudras and ati sudras
- 37. Endo gammy can be defined as an individual to marry within a\_\_\_\_\_ Defined group.
- *38. The Under the direction of Herbert Risley was important.*
- *39. The \_\_\_\_\_\_ have suffered a dilution of tribal share in population.*
- 40. A \_\_\_\_\_ group has members who are related by ancesty, marriage and adoption.
- 41. He was born in kerela and was a leader of the lower castes and Dalits. with his efforts, the Dalits got the freedom to walk on public roads and the children were allowed to join schools.
  - A. Ayyankali
  - B. Jyotiba Phule
  - C. Savitri bai phule
  - D. Periyar
- 42. The \_\_\_\_\_ Ordering Off costs is based on the distinction between purity and pollution. this is a division between something believed to be closer to the sacred and something believed to be distinct from or opposed to sacred therefore considered ritually polluting.
  - A. Segmentation
  - B. Holistic
  - C. Hierarchical
  - D. Realistic
- 43. He was born in karela, preach the. Brotherhood for all and fought against the ill effects of the caste system. he led a quiet but significant social revolution and gave the watchwords **one caste, one religion, one God for all men**.
  - ste, one religion, one Goa for all
  - A. Shree Narayan guruB. Savitribai Phule
  - C. Periyar
  - D. M N Srinivas



1.	Planning is :
	a) An art b) a science c) Both a & b d) None of these
2.	Sit and reach, partiual curl up is a Part of test :
	a) Motor fitness b) Rikli and Jones fitness c) cardio vascular fitness d) all of these
3.	takes place when the angle between the two bones attached to a joint
	increases.
	a) Extension b) Abduction c) Adduction d) Flexion
4.	Which one of the following is not example of macro mineral?
	a) Copper b) calcium c) Iodine Cobalt
5.	Which one of the following is not the part of Newton's Second Law?
	a) Force b) Mass c) Acceleration d) Laceration
6.	Which of the following is an example of Kyphosis?
	a) A b) B c) C d) D
7.	Which of the following procedure is not used for drawing up fixture for a Knock out tournament?
	a) Bye b) staircase c) special seeding d) seeding
8.	In the chair sit and reach test for senior citizens, the distance measured is between the
	and
	a) Wrist, toes b) Finger, heels c) Tip of the finger tips, toes d) None of the above
9.	Any food myth can be dispelled by which of the following way?
	a) By asking others b) on the basis of scientific knowledge c) Lab testing d) both b & C
10.	Excess intake of iron and magnesium causes
	a) Stone in kidney b) rickets c) nervous system problem d) digestive problem
11.	Which of the following is not a pitfall of dieting?
	a) Eating too little b) skipping break fast every day c) not performing normal exercises
	d) none of the above
12.	means moving the body parts away from an imaginary centre line i.e the axis
	a) Adduction b) Abduction c) Extension d) External Rotation
13.	Which of the following Law of Motion given by Sir Issac Newton is also known as ?
	a) Second Law b) third law c) First Law d) None of the above
14.	Understanding of proper sports and exercise movements will allow the participant to be more
	for long term development.
	a) Efficient b) technically sound c) prone to good habits d) all of the above
15.	In partial curl up the feet should be inches from the buttocks?
	a) 8 inches b) 10 inches c) 14 inches d) 12 inches
16.	A person with BMI of 17 will be considered as
	a) Obese b) overweight c) Normal d) Underweight
17.	Trypsin helps in the digestion of :
	a) Vitamins b) fats c) protein d) carbohydrates
18.	In which Olympics did women participate for the first time?
	a) 1896 b) 1900 c) 1904 d) 1908

- 19. What is the height of the Chavi's seat above the ground in the eight foot up and go test for agility?
  - a) 17 cm b) 44 cm c) not specified
- 20. Which one of the following is an example of the Law of Reaction?
  - a) Bouncing on trampolineb) Springing on the diving boardc) thrust against the water inswimmingd) all of the above

d) none of these

21. Which kind of human movement is this?



- a) Flexion b) Gliding c) Adduction d) Abduction
- 22. Supervision is one the task :
- a) During tournament b) pre tournament c) post tournament d) None of these
- 23. How many teams will be placed in 3<sup>rd</sup> quarter if 31 participating in knock out tournament?
  - a) 6 b) 7 c) 8 d) None of these
- 24. Identify the following test:



a) Chair sit and reach test b) chair stand test c) Medicine ball put d) Arm curl test 25. Best sources of omega 3 fatty acids are :

a) Corn oil b) wheat produce c)pork d) sardines

26. Match list 1 with List 2 and select the correct answer from the codes given below:

				List 1			List 2					
	Α.	Vitar	nin A				1. Spinach , Cabbage					
	B. Vitamin K							2. Sunlight, Cod Liver Oil				
	C. Vitamin C						3. Papaya , Carrot					
	D. Vitamin D						4.	Lemon	, Orange			
		А	В	С	D		Α	В	С	В		
a)		3	1	2	4	b)	1	2	4	3		
c)		4	3	1	2	d)	3	1	4	2		

27. Gomukhasana and Padmasana are performed to rectify which postural deformity?

a) Flatfoot b) Scoliosis c) Knock Knee d) Bow Legs

28. Select the correct reason to improve participation of female in sports.

- a) Good legal system b) Female role model c) Both a & b d) Improper motivation
- $\label{eq:29.1} \textbf{Identify the following test} \ .$



- a) Partial Curl up b) Back Scratch test c) Arm Curl test d) Sit and reach 30. \_\_\_\_\_\_ include abduction, adduction, flexion, extension etc.
  - a) Body movements b) Wellness c) Exercise d) Physical Exercise

#### 31. Match the following:

			0										
				List 1					L	ist 2			
		Α.	Mechani	cal fricti	on		1. Increased in angle						
	B. Law of Inertia C. Take off High jump							<ol> <li>Object are solid comes in contract</li> <li>3<sup>rd</sup> Law of Motion</li> </ol>					
	D. Extension						4. Things remain on its position						
_		А	В	С	D		А	В	С	В			
	a)	2	4	3	1	b)	4	2	3	1			
	c)	4	2	1	3	d)	3	2	1	4			
32. TP X 100 is a formula of :													
	a) American Methods b) British Method					ish Method	c) Vo	<b>D</b> <sub>2</sub>	<sub>d)</sub> BN	/1			
33.	3. Match the following:												
	List 1							List 2					
	A. Under weight						1. < 18.5						
	B. Normal weight						2. 25 – 29.9						
	C. Over weight D. Obesity				3. 18.5 – 24.9								
						4. 30-	- 34.9						
		Α	В	С	D		А	В	С	В			
	a)	2	4	3	1	b)	1	3	2	4			
	c)	4	2	1	3	d)	3	2	1	4			

34. Given below are the two statements labeled as Assertion (A) and Reason (R) Assertion (A) Biomechanics is the study of forces and their effects on living system. Reason (R) In swimming law of reaction is utilized

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A.
- c) A is true, but R is false.
- d) A is false, but R is true.

35. In which year Rikli and Jones prepared various physical fitness test for senior citizen?

- a) 1999 b) 2000 c) 2001 d) 2002
- 36. The inclusion of physical activities in life style will lead to
  - a) Growth and development of child b) correction of postural deformities
  - c) development of cognitive abilities
- d) all of the above

37. Match the following:

			List 1			List 2					
A. Infanthood							1. Skip and Balance on foot				
B. Early childhood							2. Learn Values				
	C. Middle Childhood						3. Also referred as adolesence				
	D. Late childhood						4. Learn to sit and crawl				
	А	В	С	D		А	В	С	В		
a)	3	2	1	4	b)	4	1	2	3		
c)	1	2	3	4	d)	2	3	1	4		

38. Given below are the two statements labeled as Assertion (A) and Reason (R)

Assertion (A) Pushups help in building muscular strength.

Reason (R) Pushups are Isokinetic muscular movement that provides strength to joints.

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A.
- c) A is true, but R is false.
- d) A is false, but R is true.

39. Below given is the BMI of a childrens health check-up in colony.

On the basis of above data which category does the 2<sup>nd</sup> major student population fall into?



- a) Obese b) Normal Weight c) under weight d) Over weight
- 40. Which the following tournament type is also known as an Olympic system tournament ?
  - a) Knock out tournament b) League tournament c) Round Robin tournament
  - d) Combination tournament
- 41. Which of the following image depicts the cardiovascular test ?



a) 42. Match the following:

			•									
List 1								List 2				
	Α.	Kypho	osis				1.	1. Gomukhasana				
	B. Lordosis							2. Adhrachakrasana				
	C. Scoliosis							3. Halasana				
	D. Knock Knee						4.	Dhanu	rasana			
		А	В	С	D		А	В	С	В		
a)		2	4	3	1	b)	1	3	2	4		
c)		4	3	2	1	d)	3	2	1	4		

43. Identify the following test .



d) sit and reach

- 44. Given below are the two statements labeled as Assertion (A) and Reason (R) Assertion (A) Food intolerant foods cannot be properly processed by our digestive system.
  - Reason (R) Absence of certain enzymes do not lets the food to be properly processed.e) Both A and R are true and R is the correct explanation of A.
  - f) Both A and R are true, but R is not the correct explanation of A.
  - g) A is true, but R is false.
  - h) A is false, but R is true.

45. Sophisticated sports equipment gives advantage to \_\_\_\_\_\_ athletes.

a) Elite b) Recreational c) Both a & b d) None of the above 46. What is the calorific value of water?

a) 10 joules/calorie b) 0 joules/calorie c) 25 joules/calorie d) 100 joules/calorie

- 47. Which of the following is amajor problem in qualitative analysis of sport movement?
  - a) Communicating the result to a coach b) Managing the large amounts of numerical data generated by the analysis c) Establishing reliability by objectivity d) All of the above
- 48. While taking medicine by Murthy's grandfather, a pill was dropped which sliped under the bed. The old man was not able to bend down. Seeing this Aryan quickly picked up the pill from under the bed and also poured a glass of water to his grandpa to swallow the pill

Which of the following equipment is not required to mentioned above fitted test.

- a) Ruler b) Stopwatch c) cone marker d) Both b & C
- 49. On the basis of the given figures the height of the modified bench used for test is \_\_\_\_\_ cm for womens



a) 16 b) 20 c) 18 d) 22 50. Which of the following correctly identify the human movements?



a) A-Inversion B-Circumduction b) A-Circumduction B-Inversion c) A-Dorsiflexion B-Circumduction

- d) A-Circumduction B-Inversion
- 51. Scoliosis deformity can be corrected by participating.
  - a) Trikonasana & Ardh Chakrasanab) Halasana and Paschimotasanac) Dhanurasana andChakrasanad) Bhujangasana and Ardh Chakrasana

52. Identify the test :



a) 600 m run/walk
b) six min walk test
c) eigth foot up and go test
d) standing broad jump
53. Student spent their weekend checking the health status of all the security guards of their huge gated community as a part of project work assigned by PE teacher. They found that more than half of them have shown a significant deformity in the upper part of their vertebral column.

Due to COVID Pandemic most of the children attending online classes with bad sitting posture may experience this condition later

	a)	Kyphosis	b) Lordosis	c) Scoliosis	d) Flat foot
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54. Given below is the fixture procedure of CBSE National Badminton Championship. On the basis of the above data, answer the given question



Which team play only 01 match till round 3?

- a) 10 b) 01 c) 04 d) 07
- 55. Rakesh, a state level wrestler, has been advised by his coach to take an adequate amount of simple carbohydrates, vitamins, minerals and protein in his diet along with the training schedule. He has also been advised to follow the diet plan and beware of the drawbacks of unsupervised dieting glucose. Fructose, glucose and lactose are
- a) Simple carbohydrate b)Complex carbohydrate c)Minerals d)Fats
- 56. Postures play a very significant role in our daily activities. Correct posture means the balancing of body in accurate and proper manner. Various types of postural deformities can be identified in individuals.



Performing this asana regularly can be remedy for person (iii):

- a) Padmasana b) Tadasana c) Vajrasana d) Halasana
- 57. Newton law of motion is widely applied in different sports. Below images of some sports are given , on the basis of which answer the given question.



Along with sprints, 2<sup>nd</sup> Law of motion is also applied in which of the following activities or sports?

- a) High jump b) Dance c) Football d) Swimming
- 58. Naman went to an old age home on the occasion of his birthday . at the time of all the inmates in the home were assembled in one place. When he enquired, they replied that they have as physical fitness test.

The weight of dumbbells in Arm Curl test for man is :

a) 5 pound

b) 4 pound

c) 8 pound
- 59. Quasimodo the "Hunckback of Notre Dame" suffered from abnormal thoracic curvature called kyphosis. In this condition the accumulated convexity of the curvature is:
  - a) Caudal b) lateral c) medical d) posterior
- 60. Ramesh who is long jumper but his landing is improper. So he could not win the event in District meet. So Ramesh approached to his coach to seek his help to improve his performance . his coach explained Ramesh the proper technique to be followed so as to have the correct body posture while landing. His coach also motivated Ramesh to constantly practice this technique to perfect it. After the one year of training, Ramesh won the gold medal in Inter Zonal Athletics meet.

Mention the reason why his coach explained to Ramesh to follow proper technique.

a) To have correct body postureb) to improve hisa movement while playingc) to have perfection in long jumpd) so that he could win the medal in the Inter Zonal Athletic meet.