



# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI  
ANNUAL EXAMINATION (2020-21)

Class:-XI  
Time- 3 Hrs.

Subject:- English  
M.M.-80

**General Instruction: -**

1. This paper is divided into two main parts: A and B. Each part has further sub parts. All parts are compulsory.
2. Separate instructions are given with each sub part and question, wherever necessary.
3. Read the instructions very carefully and follow them faithfully.
4. Do not exceed the prescribed word limit while answering the questions.

**Part – A (40 marks)  
(Reading)**

**I. Read the passage given below.**

1. My first tryst with Shakespeare several years ago was an enforced one. The Merchant of Venice was a prescribed book in class 9 when I was at school. I had read the wonderful Lamb's Tales from Shakespeare and considered myself an authority on the stories. I did not think it necessary to read the antiquated language or trudge through several seemingly abstruse paragraphs to get to the main point. To spend a whole year to decipher a play when I had understood the story in a few pages seemed to be a sheer waste of time. Yet, somewhere along the way, I was drawn into the world of the Merchant of Venice, their portly argosies, the signors and rich burghers and the news on the Rialto. The language yielded its riches slowly, the characters became well drawn, more rounded and the impassioned speeches of Shylock and Portia stirred up a flurry of unexamined questions. Since then, I have read several other plays, have seen a couple of theatrical performances and watched young Leonardo Di Caprio in a modern Romeo and Juliet film. Shakespeare has been around.

2. Shakespeare has shaped the writing and storytelling in the English language like no other writer has. He liberally borrowed, bent and brought new words into the English language from addiction, bump critic to worthless and zany. The phrases that he coined roll off our tongues as over – used adages – All that glitters is not gold (*The Merchant of Venice*), Jealousy is a green – eyed monster (*Othello*), and the perennial ‘All is well that ends well’. He has influenced several writers and been quoted by many of them. One of my favourite authors P.G. Wodehouse had the odd Shakespearean phrase popping up in whacky situation like the ‘milk of human kindness’ sloshing inside someone or references to Banquo and Macbeth explained to Bertie by the estimable Jeeves who knew his Shakespeare. The plays have been translated into most languages, including several regional Indian *bhashas*. They have lent themselves to film adaptations, including the Vishal Bharadwaj’s *Maqbool* (*Macbeth*) and *Omkara* (*Othello*).
3. The tragedies and comedies of Shakespeare cover every possible theme, and idea – love, greed, jealousy, racism, friendship, mistaken identities, murder, mutiny, politics, feminism and revenge. Like any other celebrity, he has been the subject of speculation and controversy. There have been several conspiracy theories afloat on the ‘real’ authorship of the plays, including a recent claim by a professor in Sicily that Shakespeare was actually Italian. Despite everything, Shakespeare’s appeal is universal, the stories transcend language and nationalities. However, more than 400 years after Shakespeare’s birth, I can’t help wondering if anyone will read his works in the days to come.
4. The average attention span in front of a – television channel is about 4 seconds before flicking on the remote to move to another. It is perfectly

acceptable to massacre the rules of grammar and syntax before you can say ‘why dis kolaveri di?’ When you can tell a whole story in 140 characters, reading 14 sentences can be a chore. Who will have the desire or patience to dredge up the treasures that lie within?

5. Shakespeare’s works have proved to be sturdy, unshakable through the centuries, moving with the times, lending themselves to newer forms. I hope they don’t get relegated to a few diehard literature students or musty libraries. Who knows, we might yet have a different form of Shakespeare that will appeal to the Gen Next, a form that will induce them to approach an original play with a sense of anticipation, of beginning a quest to understand and appreciate a good story, well told.

Nothing of him that does fade,  
But doth suffer a sea – change  
Into something rich and strange.

**A. On the basis of your understanding of the above passage, answer any ten questions from the eleven given below.**

**[1x10=10]**

- a. The writer considered himself an authority on Shakespeare after reading \_\_\_\_\_
- i. The Merchant of Venice
  - ii. Romeo and Juliet
  - iii. Lamb’s Tales
  - iv. Leonardo Di Caprio
- b. The best known Shakespearean quote is \_\_\_\_\_
- i. all that glitters is not gold
  - ii. all is well that ends well
  - iii. jealousy is a green – eyed monster
  - iv. milk of human kindness

- c. The claim of the Italian professor from Sicily was that \_\_\_\_\_
- i. Shakespeare was an Italian
  - ii. he covers every possible theme and idea
  - iii. there have been several conspiracy theories
  - iv. Shakespeare was a subject of speculation
- d. The writer read *The Merchant of Venice* when he was a student of Class \_\_\_\_\_
- i. 9
  - ii. 8
  - iii. 7
  - iv. 12
- e. As per the passage, when a story can be told in 140 characters, what reading can become a chore?
- i. 14 words
  - ii. 14 sentences
  - iii. 14 letter
  - iv. 14 phrases
- f. Shakespeare has been a subject of \_\_\_\_\_
- i. authority on English
  - ii. speculation
  - iii. controversy
  - iv. Both (ii) and (iii)
- g. The speeches of \_\_\_\_\_ and \_\_\_\_\_ stirs up a flurry of unexamined questions.
- i. Romeo and Juliet
  - ii. Leonardo Di Caprio and Macbeth
  - iii. Portia and Shylock
  - iv. Banquo and Macbeth

- h. Shakespeare has \_\_\_\_\_
- i. shaped the writing and story telling
  - ii. shaped the plays and dramas
  - iii. shaped the language
  - iv. shaped the English language
- i. Shakespeare's appeal is \_\_\_\_\_
- i. local
  - ii. universal
  - iii. to the patrons of language lovers
  - iv. to the patrons of language critics
- j. \_\_\_\_\_ in para 3 means "go beyond usual limits".
- i. speculation
  - ii. mutiny
  - iii. transcend
  - iv. conspiracy
- k. The antonym of 'obvious' in para 1 is \_\_\_\_\_.
- i. abstruse
  - ii. argosies
  - iii. impassioned
  - iv. flurry

**II. Read the passage given below.**

**[1x8=8]**

1. I was born on 30<sup>th</sup> of November, 1835, in the almost invisible village of Florida, Monroe County, Missouri. I suppose Florida had less than three hundred inhabitants. It had two streets, each a couple of hundred yards long; the rest of the avenues mere lanes, with rail fences and cornfields on either side. Both the streets and the lanes were paved with the same material – tough black mud in wet times, deep dust in dry.

- 2.** Most of the houses were of logs – all of them, indeed, except three or four; these latter were frame ones. There were none of brick, and none of stone. There was a log church, with a puncheon floor and slab benches. A puncheon floor is made of logs whose upper surfaces have been chipped flat with the adz. The cracks between the logs were not filled; there was no carpet; consequently, if you dropped anything smaller than a peach, it was likely to go through. The church was perched upon short sections of logs, which elevated it two or three feet from the ground. Hogs slept under there, and whenever the dogs got after them during services, the minister had to wait till the disturbance was over. In winter there was always a refreshing breeze up through the puncheon floor; in summer there were fleas enough for all.
- 3.** A slab bench is made of the outside cut of a saw – log, with the bark side down; it is supported on four sticks driven into auger holes at the ends; it has no back and no cushions. The church was twilighted with yellow tallow candles in tin sconces hung against the walls. Week days, the church was a schoolhouse.
- 4.** There were two stores in the village. My uncle, John A. Quarles, was proprietor of one of them. It was a very small establishment, with a few rolls of “bit” calicoes on half a dozen shelves; a few barrels of salt mackerel, coffee, and New Orleans sugar behind the counter; stacks of brooms, shovels, axes, hoes, rakes, and such things there and there; a lot of cheap hats, bonnets, and tinware strung on strings and suspended from the walls; and at the other end of the room was another counter with bags of shot on it, a cheese or two, and a keg of powder; in front of it a row of nail kegs and a few pigs of lead, and behind it a barrel or two of New Orleans molasses and native core whisk on top. If a boy bought five or ten cents’ worth of anything, he was entitled to half a handful of sugar from the barrel; if a woman bought a few yards of calico she was entitled to a spool of thread in

addition to the usual gratis “trimmin’s”; if a man bought a trifle, he was at liberty to draw and swallow as big a drink of whisky as he wanted.

5. Everything was cheap : apples, peaches, sweet potatoes, Irish potatoes, and corn, ten cents a bushel; chickens, ten cents a piece; butter, six cents a pound; eggs, three cents a dozen; coffee and sugar, five cents a pound; whisky, ten cents a gallon. I do not know how prices are out there in interior Missouri now, but I know what they are here in Hartford, Connecticut. To wit : apples, three dollars a bushel; peaches, five dollars; Irish potatoes (choice Bermudas), five dollars; chickens, a dollar to a dollar and a half apiece, according to weight; butter, forty – five to sixty cents a pound.

*(An Excerpt from Mark Twain’s Autobiography)*

**On the basis of your understanding of the above passage, answer any eight question from the nine given below.**

- a. Lanes in Florida were paved with \_\_\_\_\_.
- i. wet earth and shingles
  - ii. black mud in wet times and deep dust in the dry months
  - iii. back mud in wet times and dry mud in dry times
  - iv. dry mud in wet times and wet mud in dry times
- b. During weekdays the local church served as a \_\_\_\_\_.
- i. bazaar
  - ii. pilgrim spot
  - iii. schoolhouse
  - iv. priest’s lodgings

- c. If a boy customer bought five to ten cents' worth of goods he was entitled to \_\_\_\_\_.
- i. a spoonful of molasses free
  - ii. a bale of calico
  - iii. a cheese or two
  - iv. half a handful of sugar
- d. The church was twilighted with \_\_\_\_\_.
- i. red candles
  - ii. beautiful lighthouse
  - iii. yellow bulbs
  - iv. yellow tallow candles
- e. When the author was born, Florida had \_\_\_\_\_.
- i. more than three hundred
  - ii. no inhabitants
  - iii. only three hundred
  - iv. less than three hundred inhabitants
- f. Uncle John A. Quarles was \_\_\_\_\_.
- i. a resident of Delhi
  - ii. the founder of Hartford
  - iii. the proprietor of a store in the village
  - iv. none of the above
- g. The author hailed from \_\_\_\_\_.
- i. Hartford
  - ii. New Orleans
  - iii. Florida
  - iv. Ireland
- h. Most of the houses in Florida were made of \_\_\_\_\_.
- i. bricks and stones
  - ii. wood
  - iii. logs
  - iv. cement



- i Winters were marked with \_\_\_\_\_.
- i. stale breeze
  - ii. gusty wind
  - iii. hail storm
  - iv. refreshing breeze

### GRAMMAR

#### III. Fill in the blanks using the correct options

**(Answer any four)**

**[1x4=4]**

1. When the Principal entered the class, a student \_\_\_\_\_ on the blackboard.
  - a. Wrote
  - b. was writing
  - c. writes
  - d. is writing
2. In chemical terms radium \_\_\_\_\_ little from barium.
  - a. different
  - b. differs
  - c. differed
  - d. is differing
3. The scientific history of radium \_\_\_\_\_ beautiful.
  - a. was
  - b. is
  - c. had been
  - d. is being
4. I wanted \_\_\_\_\_ if there were other elements, giving out rays of the same kind.
  - a. to know
  - b. knowing
  - c. know
  - d. am knowing

5. All the elements \_\_\_\_\_ such radiation I have termed radioactive.
- a. emission
  - b. are emitting
  - c. have emitted
  - d. emitting

**IV. In the following questions you are required to rearrange these parts which are labelled P, Q, R and S to produce the correct sentence.**

**Answer any four.**

**(1X4=4)**

1. P. for thousands of years.  
Q. famous symbols of ancient civilizations.  
R. Monuments have been created.  
S. and they are often the most durable and
- a. S R Q P
  - b. Q P R S
  - c. P R S Q
  - d. R P S Q
2. P. is one of the most widely used indicators.  
Q. of ecosystems and their biodiversity.  
R. for assessing the condition.  
S. the conservation status of plants and animals.
- a. S P R Q
  - b. S R Q P
  - c. Q R P S
  - d. P Q R S
3. P. for a short time where a new, innovating, or much improved product.  
Q. the practice of 'price skimming'  
R. is launched onto a market  
S. involves charging a relatively high price.
- a. Q S P R
  - b. R S Q P
  - c. P R S Q
  - d. R Q S P

4. P. by an emperor named Shah Jahan.  
Q. The Taj Mahal is a  
R. in memory of his wife Mumtaz Mahal  
S. beautiful monument built in 1631  
a. Q P R S  
b. Q S R P  
c. P Q R S  
d. Q S P R
5. P. was designed by the British architect George Wittet and  
Q. The Gateway of India  
R. in the year 1924  
S. was opened for general Public  
a. Q S P R  
b. Q P S R  
c. P Q S R  
d. S R Q P

### **LITERATURE**

***(Answer any one of the two extracts)***

**[1x3=3]**

**V. Was it when I found my mind was really mine.**

**To use whichever way I choose.**

**Producing thoughts that were not those of other people but my own and mine alone.**

1. What is the poem 'Childhood with reference to'?
- Poet's lost childhood
  - Childhood of every person
  - Childhood of poet's child
  - Poet's father's childhood
2. After what age did the poet realise that he had lost his childhood?
- Twelve
  - Eleven
  - Ten
  - Thirteen

3. What did the poet realise about his mind when he lost his childhood?
- That he can use it in whichever way he wants
  - That he is very intelligent
  - That he is dumb
  - That he cannot use it in whichever way he wants.

**OR**

The whole tree trembles and thrills.

It is the engine of her family.

She stokes it full, then flirts out to a branch – end,

Showing her barred face identity mark.

- What poetic device is used in the line ‘it is the engine of her family’?
  - metaphor
  - alliteration
  - personification
  - none of these
- What role does the tree play for the Goldfinch bird?
  - a shelter
  - source of food
  - gives colour
  - none of these
- Why was the Goldfinch body barely visible?
  - Because of her colour
  - Because she was small
  - Because of the height of the tree
  - Because of the branches

**VI. Answer the questions based on the given extract. (Choose any two extracts and answer the questions) [1x6=6]**

The painter clapped his hands, and the entrance to the cave opened. “The inside is splendid, beyond anything words can convey. The painter entered the cave; but the entrance closed behind him .....

1. What path does the Chinese painter's art create?
  - a. Horizontal
  - b. Vertical
  - c. a path for your eyes to travel up & down, then back again, in a leisurely movement
  - d. stillness
2. What does the European Figurative painting mean to the viewer?
  - a. Illusion
  - b. Imagination
  - c. Exactly as he sees it from specific angle.
  - d. view of the painter
3. What according to the painter dwells in the cave?
  - a. a spirit
  - b. magic
  - c. mystery
  - d. dragon

**OR**

I believe there is a rule that form results should only be announced by the headmaster on the last day of term..... So you've got to wait until tomorrow to know your fate, have you?

1. Who has written 'The Browning Version'?
  - a. Terence Rattigan
  - b. Mr. Edgar S, Woolard
  - c. Mr. Lester Brown
  - d. Kushwant Singh
2. Where is the starting scene of the play set?
  - a. Classroom
  - b. Playground
  - c. Staff room
  - d. Auditorium

3. In which class does Taplow study?
- Lower fifth
  - Upper Seventh
  - Upper fifth
  - Lower tenth

**OR**

What I am going to tell you is something that happened 10 years ago. We did not have many people who know English .....Rangappa had come the other day to invite me for dinner. What's the occasion? I asked.

- Who is Shyama in the story?
  - Ratna and Ranga's child
  - The author's son
  - Ranga's nephew
  - None of the above
- The Story 'Ranga's Marriage' is set in a village in
  - Madurai
  - Bangalore
  - Mysore
  - Bhubaneswar
- The narrator is a \_\_\_\_\_ person.
  - Humorous
  - Reserved
  - Arrogant
  - None of these

**VII.** Answer the following questions choosing the appropriate answer (answer only five) **[1x5=5]**

- Mrs. Fitzgerald learned to predict the future in
  - The West
  - The East

- c. The Middle – East
  - d. None of these
2. “The family that had ruled for centuries was coming to an end”, \_\_\_\_\_ and then Akhenaten went a little wacky. Who said this \_\_\_\_\_
- a. Carter
  - b. Ray Johnson
  - c. Zahi Hawass
  - d. None of these
3. To whom John Byro told about his white horse missing?
- a. Uncle Khosrove
  - b. Zorab’s Father
  - c. Mourad’s Mother
  - d. Aram’s Mother
4. Tibetan Mastiffs were famous in China’s royal court.
- a. as big animal
  - b. as wild animals
  - c. as hunting dogs
  - d. None of the above
5. What does the rain do when she doesn’t care if anyone bothers about her deeds or not?
- a. She completes her work and comes back home.
  - b. She completes her work and talks to the earth.
  - c. She talks to the land.
  - d. She works harder.
6. Andrew got oblivious to all the work he had done in Blaenelly.....
- a. Because he got all hopeless.
  - b. Because he did something extraordinary that night.
  - c. Because he was leaving Blaenelly.
  - d. Because he got tired.

**(Part – B) 40 Marks**

- 1. Read the following passage carefully and answer the questions that follow : (8 marks)**

Egotism is the most common fault of mankind. Product of the perfectly natural desire to display oneself, egotism, which is an exaggerated form of self – display, can take such a variety of shapes that it is not always easy to discern. Beyond any shadow of doubt, however, it is a personal defect that ought to be constantly hunted down and scotched, for it impairs the personality, and frustrates all effects at self – improvement. This is the easily recognizable form of egotism that is evidenced in the person who continually talks of his own affairs. You must all have met the kind of man who is never happy save when recounting his exploits and experiences in life; and whatever subject he may begin discussing you feel quite sure that he will sooner or later arrive at himself. Although such a blatant kind of egotism is apparent to the onlooker, it may not be so easy for the egotist himself to recognize his fault. But if he can put on his guard – and it behoves each one of us to examine carefully whether we are entirely immune from this canker – there is always hope of a cure. On the other hand, there is a type, not uncommon, which evidences its egotism by affecting a humility that is certainly not felt, and ostentatiously avoiding the use of pronoun “I” in speech and in writing. Such affecting is an infallible sign of egotism, and it is all the more reprehensible because it is deliberately assumed by the person.

Next we come to the individual who holds strong opinions and insists on forcing these opinions on to others. He constantly lays down the law, he knows and he jolly well insists that you shall accept his viewpoints. Here again, there is not a great difficulty in recognizing the egotistical aspect of this conduct, although it is not so easy to remove such a defect, for a person



of this kind is generally possessed of a fiery temper – but again, it can be done, and recognition of the defect is the first step towards its cure.

There are two other well – known types of egotists – the over – precise person and the officious one. The former offends by his meticulous habits, his insistence on having everything just right – just right generally connoting the way he personally wants them to be. The officious individual succeeds in making himself most disliked because of his detestable habit of always showing or telling other people how to do things. He will glibly appeal to duty; he will continually find fault with another’s way of doing things, and point out the immense superiority of his method. In his own eyes, he is always right.

***(Literary)***

### **Questions**

- a. On the basis of your reading of the above passage, make notes on it, in points only, using headings and sub – headings. Also use recognizable abbreviation, wherever necessary (minimum 4). Supply an appropriate title to it.

**(5 marks)**

- b. Write a summary of the above passage in about 50 words.

**(3 marks)**

### **WRITING SECTION**

- 2.** You are the Head Boy/Head Girl of your school. Draft a notice to be put up on the school Notice Board mentioning that your online classes will commence from next week. The late entries will not be allowed to join the Zoom Meeting.

(Word Limit – 50 words) **(3 marks)**

**OR**

You are Head Boy/Head Girl of your school. Write a notice for your school Notice Board asking the students to wear summer uniform from 1<sup>st</sup> April and necessary changes to be made. (Word Limit – 50 words)

3. Prepare a poster advising people to take precautionary measures to prevent the spread of Covid – 19, to reinforce health practices and elevate awareness in physical spaces.

**(3 marks)**

**OR**

Draft a poster advising people not to take alcoholic drinks, illustrating the danger of consuming alcohol. Your illustration should be in conformity with the theme provided to you.

4. You are Ambika Sharma, librarian of Laxman Public School, Hauz khas. Write a letter to Time Life Publishers enquiring about concise dictionaries and illustrated children's encyclopedia for the school library. Ask them for discount and the mode of payment.

(Word Limit 120 – 150) **(5 marks)**

**OR**

Write an application to the Principal highlighting students inability to understand the online teaching of CBSE and, therefore request him to arrange a meeting of pedagogues, representatives and educationist in order to make their evaluation crystal clear. This is to increase student's performance in school, at home and in examinations. You are Sudhakar/Sudha of D.A.V. School, Greater Kailash, Part-1, New Delhi 110017. (Word Limit 120 – 150)

5. In an Inter – School debate, your school has to speak on the topic ‘The Generation Gap is Destroying Family life.’ Write a debate in favour or against the motion. You are Binda/Balbir of Bal Vikas Vidyalaya, Panipat.  
(Word Limit 120 – 150) **(5 marks)**

**OR**

A large number of advertisers are using children to sell their products. You are against the concept of children being used in advertisements. Write a speech to put forward your views. You are Shail/Sheela.  
(Word Limit 120 – 150)

**LITERATURE SECTION**

6. **Answer any Two questions in not more than 30 – 40 words (One each from prose/poetry)**

**[2X2=4]**

1. To Albert facts did not matter but only ideas mattered. How did he try to confront this view point of his?
2. What is the importance of white unpainted space in Chinese landscape?
3. What does the goldfinch signify?
4. How has adult hypocrisy shattered the innocence of the childlike behaviour?

7. **Answer any One question in not more than 40–50 words. **1x2=2****

1. Why is Mrs. Pearson not able to set her family right?
2. How did Albert finally leave the school where he had spent five years?

8. **Answer any One question in 120 – 150 words. **1x5=5****

1. The ‘venture’ narrator dared to take is not small. What inspired him to go on this journey and what preparations did he make for its success?  
(we’re not afraid to die.....)

2. Journey to Kailash hills is not an easy one. The author Nick Middleton experiences a lot of things Give a vivid account of his journey?

**9. Answer any one question in 120 – 150 words.**

**[1X5=5]**

1. Andrew Manson was torn between two desires. What were the desires and how did Andrew resolve?
2. Though the narrator failed miserably on her first visit but still she tried for the second time. What light does this incident throw on narrator's character?

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# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2020-21)

Class:- XI  
Time- 3 Hrs.

Subject:- Physics  
M.M-70

## General Instructions :-

Read the following instructions very carefully and strictly follow them :-

- (i) There are 33 questions in all. All questions are compulsory.
- (ii) This question paper comprises five sections A, B, C, D and E.
- (iii) Section - A contains ten very short answer questions and four assertion-reason MCQs of 1 mark each.
- (iv) Section- B contains two case-based questions of 4 marks each.
- (v) Section-C contains nine short answer questions of 2 marks each.
- (vi) Section - D contains five short answer questions of 3 marks each.
- (vii) Section - E contains three long answer questions of 5 marks each.
- (viii) There is no overall choice in the question paper. However, internal choices have been provided. You have to attempt only one of the choices in such questions.

## SECTION - A

1. Mention the S.I. unit of the coefficient of thermal conductivity.
2. The angular wave number is also called .....

**OR**

The time period of oscillations of a mass  $m$  attached to a spring is  $T$ . The spring is now cut into 3 equal parts. If those parts are connected in parallel, then the new time period  $T'$  of the combination (for the same mass), in terms of  $T$  will be.....

3. Two bodies of different masses of 2 kg and 5 kg are moving with velocities  $2\text{m/s}$  and  $10\text{ m/s}$  towards each other due to mutual gravitational attraction. What will be the velocity of their centre of mass?

4. Sketch a graph, showing the variation of the linear momentum of a body with its mass, when the kinetic energy of the body is constant.

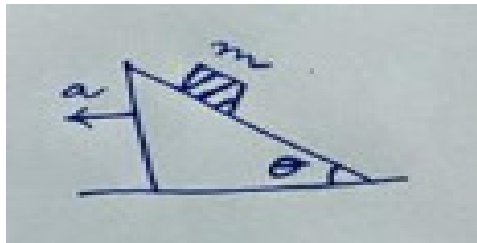
OR

Two springs of spring constant  $1500 \text{ N/m}$  and  $3000 \text{ N/m}$  respectively are stretched with the same force. Find the ratio of their potential energies.

5. A particle starts moving from rest with uniform acceleration. It travels a distance  $x$  in the first two seconds and a distance  $y$  in the next two seconds. What is the relation between  $y$  and  $x$ ?
6. A man is pulling a rope attached to a block on a smooth horizontal table. Mention one condition under which, the tension in the rope will be the same at all points.

OR

With what minimum acceleration ' $a$ ', must the wedge be pulled so that the block of mass  $m$  kept on it, falls freely?



7. What will be the vector component of the vector  $\vec{A} = -35 \hat{k}$  along the  $+X$  axis?
8. What is meant by radius of gyration?
9. A ball  $P$  is thrown vertically upwards with speed ' $w$ '. At the same instant, another ball  $Q$  is released from rest at height  $H$ . What will be the speed of  $P$  relative to  $Q$  at time  $t$ ?
10. If the speed of a projectile at its maximum height is half of its initial speed, what must be its angle of projection with respect to the vertical?

For questions 11, 12, 13 and 14, two statements are given – one labelled Assertion (A) and the other labelled Reason (R) . Select the correct answer to these 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) Both A and R are false.

11. Assertion (A) : The centre of gravity of a body coincides with it's centre of mass only if the gravitational field does not vary from one part of the body to another.

Reason (R) : Centre of gravity is independent of the gravitational field.

12. Assertion (A): A particle is thrown vertically upwards. If air resistance is taken into consideration, then retardation in the upward journey is more than the acceleration in the downward journey.

Reason (R) : Some mechanical energy is lost in the form of heat due to air friction.

13. Assertion (A): The trajectory of an object moving under the acceleration due to gravity can be a straight line or a parabola depending on the initial conditions.

Reason (R): The shape of the trajectory of the motion of an object is determined by the acceleration alone.

14. Assertion (A) : A lift is ascending with decreasing speed , so it's acceleration is downwards.

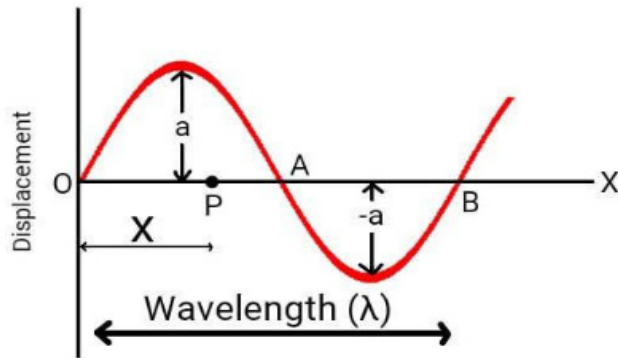
Reason : (R): A body always move in the direction of it's acceleration.

### **SECTION - B**

Q. 15 and Q. 16 are case-study based questions and are compulsory. Attempt any **four** subparts from each question. Each subpart carries 1 mark.

15. PROGRESSIVE WAVE :

A wave that travels from one point of the medium to another is called a progressive wave. It may be transverse or longitudinal. If, during the propagation of a wave through a medium, the particles of the medium vibrate simple harmonically about their mean positions, then the wave is said to be a plane progressive harmonic wave.



(i) The phase difference between oscillatory motion of two points separated by a distance of  $\lambda/2$  is (where  $\lambda$  is the wavelength) :

- a)  $\frac{\pi}{2}$  rad                      b)  $\pi$  rad                      c)  $\frac{3\pi}{2}$  rad                      d)  $2\pi$  rad

(ii) In case of a travelling wave reflected at a rigid boundary , a phase change of ..... occurs

- a) zero                      b)  $\pi$  rad                      c)  $\frac{\pi}{2}$  rad                      d) None of these

(iii) For a travelling harmonic wave,  $y(x,t) = 2 \cos 2 \pi (10t - 0.008x + 0.35)$  where  $x$  and  $y$  are in cm and  $t$  is in sec, phase difference between the oscillatory motion of two points separated by a distance of 0.5 m is : -

- a)  $0.2 \pi$  rad                      b)  $0.4 \pi$  rad                      c)  $0.6 \pi$  rad                      d)  $0.8 \pi$  rad

(iv) Which of the following statements is incorrect during the propagation of a plane progressive mechanical wave?

- a) Amplitude of all the particles is equal  
b) Particles of the medium execute SHM  
c) Wave velocity depends upon the nature of the medium.  
d) All the particles vibrate in the same phase



- (v) Change in temperature of the medium changes
- a) wavelength of sound waves
  - b) frequency of sound waves
  - c) amplitude of sound waves
  - d) none of these

## 16. SATELLITES

Bodies which continuously revolve around much larger bodies in stable orbits are called satellites. There are natural and artificial satellites. The Russians were the first to put an artificial satellite in an orbit around the earth. To put a satellite into an orbit, we need to give it two velocities. Firstly, a minimum vertical velocity to take the satellite to a suitable height. Secondly, it is then given a suitable horizontal velocity to make it move into a circular orbit around the earth.



(i) A satellite is orbiting the earth in an orbit (circular) of radius  $r$ . It's -

- a) kinetic energy varies as  $r$
- b) angular momentum varies as  $\frac{1}{\sqrt{r}}$ .
- c) linear momentum varies as  $\frac{1}{r}$ .
- d) frequency of revolution varies as  $\frac{1}{r^{3/2}}$ .

(ii) For a satellite moving in an orbit around the earth, the ratio of it's potential energy to kinetic energy is

- a) 1
- b) -1
- c) 2
- d) - 2

(iii) Two satellites, A and B, have masses  $m$  and  $2m$  respectively. A is in a circular orbit of radius  $R$  and B is in a circular orbit of radius  $2R$  around the earth. The ratio of their kinetic energies  $E_A : E_B$  is :-

- a) 1                      b) 2                      c)  $\frac{1}{\sqrt{2}}$                       d)  $\frac{1}{2}$

(iv) The ratio of escape velocity at earth ( $v_e$ ) to the escape velocity at a planet ( $v_p$ ) whose radius and mean density are twice as that of the earth is

- a) 1:2                      b) 1:4                      c)  $1:2\sqrt{2}$                       d)  $1:\sqrt{2}$

(v) The height of a geostationary satellite is :-

- a) 10000 km                      b) 32000 km                      c) 36000 km                      d) 42000 km

### SECTION - C

17. What is meant by 'significant figures'? State the number of significant figures in  
a)  $0.008 \text{ cm}^2$     and    b)  $6.032 \text{ Pa}$ .

18. Write the mathematical statement of the First law of thermodynamics for a :-  
a) cyclic process                      b) adiabatic process

**OR**

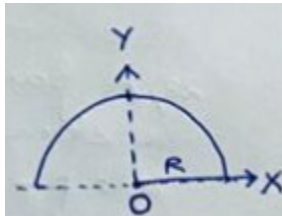
State any two assumptions of the kinetic theory of gasses.

19. A wire is cut to half its original length.  
a) How would it affect the elongation under a given load? Justify.  
b) How would it affect the maximum load it can support without exceeding the elastic limit? Justify.

**OR**

Derive the mathematical expression of the "equation of continuity". Draw the relevant diagram.

20. Determine the position coordinates (taking the centre O as the origin) of the centre of mass of a uniform semicircular wire of radius  $R$ .



21. Derive an expression for the escape velocity of an object from a planet of mass  $M$  and radius  $R$ .

22. A 100 kg gun fires a ball of 1 kg horizontally from a cliff of height 500 m. It falls on the ground at a distance of 400 m from the bottom of the cliff. The recoil velocity of the gun is  $v$ . Find  $v$ . (Take  $g = 10 \text{ N/kg}$ ).
23. Derive an expression for the centripetal force acting on a body of mass  $m$ , revolving in a circular track of radius ' $r$ '.

**OR**

A particle starts from origin at  $t = 0$  with a velocity  $5 \hat{i} \text{ m/s}$  and moves in the XY plane under the action of a force, which produces a constant acceleration of  $(3\hat{i} + 2\hat{j}) \text{ m/s}^2$ .

- a) What is the y coordinate of the particle at the instant when its x coordinate is 84 m?
- b) What is the speed of the particle at this time?
24. State the 'law of equipartition of energy'. Use it to find a)  $C_V$  and b)  $C_P$  of a non-linear triatomic gas. (The symbols have their usual meaning).
25. With the aid of a diagram, derive an expression for the acceleration of a body sliding down a rough incline.

### SECTION - D

26. Deduce an expression for the excess pressure inside a soap-bubble of radius  $R$  and surface tension of soap solution is  $T$ .

**OR**

State and prove Bernoulli's theorem.

27. The critical velocity ( $v_c$ ) depends upon the coefficient of viscosity ( $\eta$ ) of the liquid, density ( $\rho$ ) of the liquid and radius ( $r$ ) of the pipe. Derive an expression for  $v_c$  using dimensions.
28. A particle starts from point A and moves along a straight line path with an acceleration  $a = p - qx$  where  $p, q$  are constants and  $x$  is the distance from A. The particle stops at point B. Find the maximum velocity of the particle.

**OR**

Derive the expression for the distance covered in the  $n^{\text{th}}$  sec,  $s_{n\text{th}} = u + \frac{a}{2}(2n-1)$ ; where ' $u$ ' and ' $a$ ' are the initial velocity and uniform acceleration respectively.

29. The refractive index ( $n$ ) of glass is found to have values 1.49 , 1.50 , 1.52 , 1.54 and 1.48. Calculate (a) Mean Absolute Error and (b) Percentage Error.
30. Define a 'projectile'. Show that the motion of one projectile as seen from another projectile will always be a straight line motion.

**SECTION - E**

31. Derive the 'ascent formula'. Mathematically prove that the liquid does not overflow even if the capillary tube, dipped inside the liquid, is of insufficient length.

**OR**

Define 'terminal velocity' attained by a spherical body , falling through a viscous medium and derive an expression for it. What will be your observation in case the viscous medium is denser than the material of the spherical body?

32. Discuss the formation of standing waves in a string fixed at both ends. Also show that the frequency of the  $n^{\text{th}}$  harmonic is  $n$  times the fundamental frequency.

Two vibrating strings of the same material but length  $L$  and  $2L$  have radii  $2r$  and  $r$  respectively. They are stretched under the same tension. Both vibrate in their fundamental modes, with frequency  $\nu_1$  and  $\nu_2$  respectively. Find the ratio  $\nu_1:\nu_2$ .

**OR**

Explain the formation of beats analytically. Derive an expression for the beat frequency of two superimposing waves.

A tuning fork of unknown frequency gives 4 beats with a tuning fork of frequency 310 Hz. It gives the same number of beats on filing. Find the unknown frequency.

33. Mention one distinguishing feature between an elastic and an inelastic collision. Derive expressions for the final velocities of two bodies suffering elastic collision in 1 dimension.

Under what condition, do their velocities get interchanged?

**OR**

Define co-efficient of restitution. Give it's value for a perfectly elastic collision.

A ball impinges directly on a similar ball at rest. The first ball is brought to rest by the impact. If half of the kinetic energy is dissipated by the impact, find the value of the co-efficient of restitution.

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**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:- XI**  
**Time:- 3 Hrs.**

**Subject:- Chemistry**  
**F. M:- 70**

**GENERAL INSTRUCTIONS:-**

- (i) Question paper comprises of four sections A, B, C and D.
- (ii) There are 33 questions in the question paper and all questions are compulsory.
- (iii) Section A: Q1 to Q2 are case based questions having four MCQs or Reason-Assertion type based on given passage each carrying 1 mark.
- (iv) Section A: Q3 to Q16 are MCQs and Reason -Assertion type questions carrying 1 mark each.
- (v) Section B: Q17 to Q25 are short answer questions and carry 2 marks each.
- (vi) Section C: Q26 to Q30 are short answer questions and carry 3 marks each.
- (vii) Section D: Q31 to Q33 are long answer questions carrying 5 marks each.
- (viii) There are no overall choices. However internal choices have been provided.

**Section - A**

1. Read the passage given below and answer the following questions: **[1x4=4]**
- Molecular orbitals are formed by the overlap of atomic orbital. Two atomic orbitals combine to form two molecular orbitals, called bonding molecular orbital and antibonding molecular orbitals. Different atomic orbitals of one atom combine with those atomic orbitals of the second atom which have comparable energy and proper orientation. Further, if the overlapping is head on, the molecular orbital is called 'sigma' and if the overlap is lateral, the molecular orbital is called 'pi'. The molecular orbitals are filled with electrons according to the same rules as followed for filling of atomic orbitals.
- The following questions are multiple choice questions with single correct answer:
- (I) Which one of the following molecule does not exist?
- (a)  $F_2$                       (b)  $B_2$                       (c)  $Be_2$                       (d)  $Li_2$
- (II)  $H_2$ ,  $Li_2$ ,  $B_2$  each has bond order equal to 1. The order of their stability is:
- (a)  $H_2=Li_2=B_2$               (b)  $H_2>Li_2>B_2$               (c)  $H_2>B_2>Li_2$               (d)  $B_2>Li_2>H_2$

(III) Which of the following pair is expected to have same bond order?

- (a)  $O_2$ ,  $N_2$                       (b)  $O_2^+$ ,  $N_2^-$                       (c)  $O_2^-$ ,  $N_2^+$                       (d)  $O_2^-$ ,  $N_2^-$

(IV) Which of the following molecule is expected to be paramagnetic?

- (a)  $H_2$                       (b)  $C_2$                       (c)  $N_2$                       (d)  $B_2$

2. Read the passage given below and answer the following questions: **[1x4=4]**

In ionic compounds, there is electrostatic force between oppositely charged ions. Covalent bonds are present in polar as well as non-polar molecules. Polar molecules have dipole-dipole attraction. Polar molecules with non-polar molecules have dipole induced dipole attraction. Non-polar molecules have dispersion force (London force). H-Bonds are present in some polar molecules. Ion-dipole attraction exists between ions and polar molecules. Intermolecular forces are negligible in gaseous state with large intermolecular space. Interdependence of some observable properties i.e. pressure, volume, temperature and mass lead to different gas laws: Boyle's law, Charles's law, Avogadro's law and Dalton's law of partial pressure. The Ideal gas equation ( $PV=nRT$ ) is followed by ideal gases. At high pressure and low temperature intermolecular forces start operating strongly and molecules come closer to each other. They show positive and negative deviation from ideal gas behaviour and follow Vanderwaal's equation.

In these questions a statement of assertion followed by reason is given. Choose the correct answer out of the following choices:

- (a) Assertion and Reason both are correct statements and reason is correct explanation for assertion.
- (b) Assertion and Reason both are correct statements but reason is not the correct explanation for assertion.
- (c) Assertion is correct statement but reason is wrong statement.
- (d) Assertion is wrong statement but reason is correct statement.

(I) Assertion: The three states of matter are balance between intermolecular forces and thermal energy of the molecules.

Reason: Intermolecular forces tend to keep the molecules together but thermal energy of the molecules tends to keep them apart.

(II) Assertion: London forces are the attractive forces existing among non polar molecules of noble gases.

Reason: London forces are the attractive forces which operate at all distance between the molecules or atoms.

(III) Assertion: The value of Vanderwaal's constant 'a' for ammonia is larger than that of nitrogen.

Reason: Molecular weight of ammonia is smaller than that of nitrogen gas.

- (IV) Assertion: At constant temperature PV vs V plot for real gases is not a straight line.  
Reason: At high pressure all gases have  $Z > 1$ , but at intermediate pressure most gases have  $Z < 1$

Following questions (Q3-Q11) are multiple choice questions carrying 1 mark each with single correct answer:

3. One molal solution contains 1 mole of solute in [1X9=9]  
(a) 1000 gm of the solvent  
(b) 1L of the solvent  
(c) 1L of the solution  
(d) 22.4L of the solution
4. If Avogadro's no.  $N_A$ , is changed from  $6.022 \times 10^{23} \text{ mol}^{-1}$  to  $6.022 \times 10^{22} \text{ mol}^{-1}$ , this would change:  
(a) The mass of one mole of carbon  
(b) The ratio of chemical species to each other in a balanced chemical equation.  
(c) The ratio of elements to each other in a compound  
(d) The definition of mass in units of grams.
5. Which of the following terms are unitless?  
(a) Molality  
(b) Molarity  
(c) Mole fraction  
(d) Mass percent
6. 1 gm of carbonate ( $M_2CO_3$ ) on treatment with excess HCl produces 0.01186 mole of  $CO_2$ . The molar mass of  $M_2CO_3$  in gm/mole is  
(a) 118.6  
(b) 11.86  
(c) 1186  
(d) 84.3
7. The number of unpaired electrons in Ni(28) are:  
(a) 0  
(b) 2  
(c) 4  
(d) 8

8. Ionisation energy of  $\text{He}^+$  ion is  $19.6 \times 10^{-18} \text{ J/atom}$ . The energy of first stationary state ( $n=1$ ) for  $\text{Li}^{2+}$  ion is
- (a)  $8.82 \times 10^{-17} \text{ J/atom}$
  - (b)  $4.41 \times 10^{-16} \text{ J/atom}$
  - (c)  $-4.41 \times 10^{-17} \text{ J/atom}$
  - (d)  $-2.2 \times 10^{-15} \text{ J/atom}$
9. The element with atomic number 117 if discovered would be placed in
- (a) Noble gas family
  - (b) Alkali family
  - (c) Alkaline earth family
  - (d) Halogen family
10. When sodium is dissolved in liquid ammonia solution, a deep blue colour is obtained. The colour of the solution is due to
- (a) Ammoniated electron
  - (b) Sodium ion
  - (c) Sodium amide
  - (d) Ammoniated Sodium ion
11. The +1 oxidation state of Thallium is more stable than its +3 oxidation state because of
- (a) Its atomic size
  - (b) Its ionization potential
  - (c) Inert pair effect
  - (d) Diagonal relationship

In the following question (Q NO 12 -16) a statement of assertion followed by a statement of reason is given. Choose the correct answer out of the four choices: [1X5=5]

- (a) Assertion and Reason both are correct statements and reason is correct explanation for assertion.
  - (b) Assertion and Reason both are correct statements but reason is not the correct explanation for assertion.
  - (c) Assertion is correct statement but reason is wrong statement.
  - (d) Assertion is wrong statement but reason is correct statement.
12. Assertion: the energy of an electron is largely determined by its principal quantum number.  
Reason: The principal quantum number is a measure of the most probable distance of finding the electron around the nucleus.



13. Assertion: Spontaneous process is an irreversible process and may be reversed by some external agency.  
Reason: Decrease in enthalpy is a contributory factor for spontaneity.
14. Assertion: A free radical is paramagnetic species  
Reason: A free radical is formed in homolytic fission of covalent bond.
15. Assertion: Tertiary carbocations are generally formed more easily than primary carbocations.  
Reason: Hyperconjugation as well as inductive effect due to additional alkyl group stabilize tertiary carbocation.
16. Assertion: All the carbon atoms in  $\text{H}_2\text{C}=\text{C}=\text{CH}_2$  are in  $\text{sp}^2$  hybridised.  
Reason: In this molecule all the C-Atoms are attached to each other by double bonds.

### Section - B

The following questions Q17-Q25 are short answer type and carry 2 marks each. **[2X9=18]**

17. If the uncertainty in the position and velocity of a particle are  $10^{-10}$  m and  $5.27 \times 10^{-24}$  m/s respectively. Calculate the mass of the particle.

**OR**

If the position of the electron is measured within an accuracy of  $\pm 0.002$  nm. Calculate the uncertainty in the momentum of the electron.

18. Explain the following:
- (a)  $\text{CO}_2$  and  $\text{SO}_2$  both are triatomic molecules but there is a big difference in their dipole moment why?
- (b) Draw the structure of  $\text{SF}_4$  according to VSEPR theory.
19. The density of a gas is found to be  $1.56 \text{ gm/dm}^3$  at 0.98 bar pressure and  $65^\circ\text{C}$  temperature. Calculate the molar mass of the gas [ $R = 0.083 \text{ bar dm}^3\text{k}^{-1}\text{mol}^{-1}$ ].
20. An element of group 2 forms covalent oxide which is amphoteric in nature. Identify the element and write chemical reaction of the hydroxide of the element with an alkali and acid.
21. Explain the following:
- (I) Boron does not form  $\text{B}^{3+}$  ion.
- (II)  $[\text{SiF}_6]^{2-}$  is known whereas  $[\text{SiCl}_6]^{2-}$  not.

22. Answer the following questions:

(I) An alkene 'A' on ozonolysis gives a mixture of ethanal and pentan-3-one. Write the structure and IUPAC name of alkene 'A'.

(II) Out of Benzene, m-dinitrobenzene and toluene which will undergo nitration most easily and why?

23. What do you understand by the term "Autoprotolysis" of water? What is its significant?

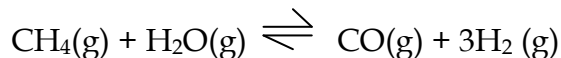
**OR**

What do you expect the nature of hydrides is, if formed by the elements of atomic numbers 15, 19, 23 and 44 with dihydrogen?

24. Assign oxidation number to the underlined elements in each of the following species



25. Dihydrogen gas is obtained from natural gas by the partial oxidation with steam as per following endothermic reaction:



(I) Write an expression of  $K_p$  for the above reaction

(II) How will the value of  $K_p$  and composition of equilibrium mixture is effected by increase in temperature?

### Section - C

The following questions Q26-Q30 are short answer type questions carrying 3 marks each.

[3X5=15]

26. (a) Write two points of difference between electron gain enthalpy and electronegativity.

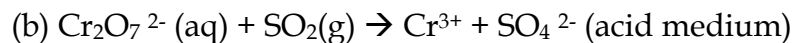
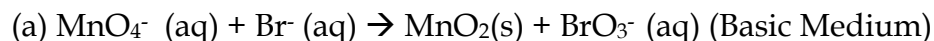
(b) Define Vanderwaal's Radius.

**OR**

(a) What is penetration effect and how does it affect the ionization enthalpy?

(b) Why do noble gases have bigger atomic size than halogen?

27. Balance the following equation by ion electron method or oxidation number method:



28. (I)  $\text{MnO}_4^{2-}$  undergoes disproportionation reaction in acidic medium but  $\text{MnO}_4^-$  does not. Give reasons.
- (II) Chlorine is used to purify drinking water. Excess of chlorine is harmful. The excess of chlorine is removed by treating it with sulphur dioxide. Present a balanced equation for the redox change taking place in water.

29. (I) Draw the structure of

But-2-ene-1,4-dial

(II) Write two important differences between inductive effect and resonance effect.

**OR**

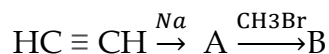
(I) Write the IUPAC name of the molecule  $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}=\text{CH}-\text{CH}_2-\text{COOH}$

(II) Explain the different types of bond fission with example.

30. (I) Explain why n-pentane has higher boiling point than neo-pentane.

(II) Give the structure of alkyl halide which when treated with sodium metal in presence of ether gives  $(\text{CH}_3)_2\text{CH}-\text{CH}(\text{CH}_3)_2$

(III) Identify the structure of A and B in the following reaction:  $\text{CH}_3\text{Br}$



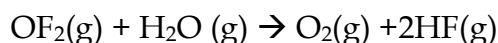
**Section - D**

Q31-Q33 are long answer type carrying 5 marks each.

**[5X3=15]**

31. (I) State Hess's law of constant heat of summation. How does it follow from the first law of Thermodynamics.

(II) Calculate the standard enthalpy change and standard internal energy change for the following reaction at 300K.



Standard enthalpy of formation of various species are given below

$$\Delta_f H^\circ : \text{OF}_2(\text{g}) = 23.0 \text{ KJ/mol}$$

$$\text{H}_2\text{O}(\text{g}) = -241.8 \text{ KJ/mol}$$

$$\text{HF}(\text{g}) = -268.6 \text{ KJ/mol}$$

$$R = 8.314 \text{ J/K/mol}$$

OR

(I) What are the differences between

- (a) Isothermal and Adiabatic process
- (b) Intensive and extensive property

(II) Show that the reaction

$\text{CO(g)} + \frac{1}{2} \text{O}_2 \text{(g)} \rightarrow \text{CO}_2\text{(g)}$  at 300 K is spontaneous and exothermic, when the standard enthalpy change is  $-0.094 \text{ KJ/mol/K}$ . The standard Gibb's free energies of the formation for  $\text{CO}_2$  and  $\text{CO}$  are  $-394.4$  and  $-137.2 \text{ KJ/mol}$  respectively.

32. (a) The species  $\text{H}_2\text{O}$ ,  $\text{HCO}_3^-$ ,  $\text{HSO}_4^-$  and  $\text{NH}_3$  can act both as Bronsted acids and bases. For each case give corresponding conjugate acid and base.
- (b) The ionization constant of acetic acid is  $1.74 \times 10^{-5}$ . Calculate the degree of dissociation of acetic acid in its  $0.05\text{M}$  solution. Calculate the concentration of acetate ion in the solution and its pH.

OR

(a) Derive a relation between  $K_p$  and  $K_c$ .

(b) Two moles of  $\text{PCl}_5$  were heated at  $327^\circ\text{C}$  in a closed two litre vessel and when equilibrium was achieved,  $\text{PCl}_5$  was found to be 40% dissociated into  $\text{PCl}_3$  and  $\text{Cl}_2$ . Calculate the equilibrium constant  $K_c$ .

33. (I) Explain the following reaction with example

- (a) Friedel Craft Alkylation
- (b) Markovnikov's rule

(II) Write one chemical test to distinguish between ethene and ethyne.

(III) How will you convert the following:

- (a) Benzene into m-nitrochloro benzene
- (b) Benzoic acid into Benzene.

OR

(I) Explain the following with example

- (a) Dehydrohalogenation
- (b) Aromatization

(II) Draw the cis and trans isomer of hex-2-ene.

(III) How will you convert the following :

- (a) Benzene into p-nitrotoluene
- (b) Ethene into Benzene.



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:- XI**  
**Time:- 3 Hrs.**

**Subject:- Mathematics**  
**F. M:- 80**

**General Instructions:-**

1. This question paper contains two **parts A and B**. Each part is compulsory. Part A carries **24** marks and Part B carries **56** marks.
2. **Part-A** has Objective Type Questions and **Part -B** has Descriptive Type Questions.
3. Both **Part A** and **Part B** have choices.

**Part - A:**

1. It consists of two sections- **I and II**.
2. Section **I** comprises of 16 questions of very short answer type questions.
3. Section **II** contains **2** case studies. Each case study comprises of 5 case-based MCQs. An examinee is to attempt **any 4 out of 5 MCQs**.
4. Internal choice is provided in **3** questions of section - I.

**Part - B:**

1. It consists of three sections- **III, IV and V**.
2. Section **III** comprises of 10 questions of **2 marks** each.
3. Section **IV** comprises of 7 questions of **3 marks** each.
4. Section **V** comprises of 3 questions of **5 marks** each.
5. Internal choice is provided in **3** questions of Section -III, **2** questions of Section- IV and **1** question of Section-V. You have to attempt only one of the alternatives in all such questions.

<b>PART A (SECTION I)</b> <span style="float: right;"><b>16x1= 16marks</b></span>
<b>Section I has 16 questions of 1 mark each. Internal choice is provided in 3 questions</b>

1. Write the following set in the roster form.  $A = \{x \mid x \text{ is a positive integer less than } 10 \text{ and } 2^x - 1 \text{ is an odd number}\}$ .

**OR**

Given that  $N = \{1, 2, 3, \dots, 100\}$ , then write the subset  $B$  of  $N$ , whose elements are represented by  $x + 2$ , where  $x \in N$ .

2. Let  $f$  and  $g$  be real functions defined by  $f(x) = 2x + 1$  and  $g(x) = 4x - 7$ .

For what real numbers of  $x$ ,  $f(x) = g(x)$ ?

3. The Cartesian product  $A \times A$  has 9 elements among which are found  $(-1, 0)$  and  $(0, 1)$ . Find the set  $A$  and the remaining elements in  $A \times A$ .
4. Express the following angle in sexagesimal system (i.e. in degrees, minutes, seconds) :  $6^c$ .
5. Express  $i^{-38}$  in the form  $(a + ib)$ .
6. Find the multiplicative inverse of  $(4 - 3i)$ .
7. Solve the inequality,  $3x - 5 < x + 7$ , when  $x$  is an integer.
8. If  ${}^{15}P_r = 2730$ , then find  ${}^5P_r$ .
9. Eight children are to be seated on a bench. How many arrangements are possible if the youngest child sits at the left hand end of the bench ?

**OR**

For a set of six true or false questions, no student has written all correct answers and no two students have given the same sequence of answers, what is the maximum number of students in the class for this job to be possible ?

10. Which term of an A.P.  $7 - 4i, 6 - 2i, 5 - 0i, 4 + 2i, \dots$  is (i) purely real (ii) purely imaginary ?
11. Find the value of  $k$ , if the straight line  $2x + 3y + 4 + k(6x - y + 12) = 0$  is perpendicular to the line  $7x + 5y - 4 = 0$ .
12. If the line  $y = \sqrt{3}x + k$  touches the circle  $x^2 + y^2 = 16$ , then find the value of  $k$ .
13. A point is on the  $x$ -axis. Write its  $y$ -coordinate and  $z$ -coordinate.
14. Find  $\lim_{x \rightarrow 1} \frac{x^2 + 1}{x + 100}$
15. For the frequency distribution, standard deviation is 2 and arithmetic mean is 15. Find the coefficient of variation.
16. If  $E$  and  $F$  are events such that  $P(E) = \frac{1}{4}$ ,  $P(F) = \frac{1}{2}$  and  $P(E \text{ and } F) = \frac{1}{8}$ , find  $P(E \text{ or } F)$ .

Case study based questions are compulsory. Attempt any four sub parts of each question. Each subpart carries 1 mark

17. Answer the following questions.

- (i) How many three digit numbers can be formed such that at least one of the digit is 8 ?  
(a) 250                      (b) 252                      (c) 254                      (d) 256
- (ii) Find the number of arrangements of the letters of the word INDEPENDENCE.  
(a) 1662300                      (b) 1600000                      (c) 1863200                      (d) 1663200
- (iii) The total number of 9 digit numbers which have all different digits is  
(a) 10!                      (b) 9!                      (c)  $9 \times 9!$                       (d)  $10 \times 10!$
- (iv) What is the number of ways of choosing 4 cards from a pack of 52 playing cards if four cards belong to four different suits?  
(a) 270525                      (b) 260525                      (c) 250525                      (d) 270725
- (v) How many triangles can be formed by joining the vertices of a hexagon?  
(a) 25                      (b) 20                      (c) 22                      (d) 26

18. Answer the following questions.

- (i) Find the probability of getting a total of more than 10 in a single throw of 2 dice.  
(a)  $5/36$                       (b)  $1/4$                       (c)  $1/12$                       (d)  $1/6$
- (ii) Three light bulbs are selected at random from 20 bulbs of which 5 are defective. What is the probability that exactly one is defective ?  
(a)  $45/76$                       (b)  $15/20$                       (c)  $5/20$                       (d)  $35/76$   
In a relay race there are five teams A, B, C, D and E.
- (iii) What is the probability that A, B and C finish first, second and third, respectively?  
(a)  $2/60$                       (b)  $1/60$                       (c)  $3/60$                       (d)  $4/60$
- (iv) What is the probability that A, B and C are first three to finish (in any order)?  
(Assume that all finishing orders are equally likely)  
(a)  $2/10$                       (b)  $5/10$                       (c)  $1/10$                       (d)  $4/10$

(v) Out of eleven tickets marked with numbers 1 to 11, three tickets are drawn at random.

Find the probability that the numbers on them are in A.P.

- (a)  $\frac{20}{11C_3}$                       (b)  $\frac{27}{11C_3}$                       (c)  $\frac{30}{11C_3}$                       (d)  $\frac{25}{11C_3}$

**Part -B (SECTION III) 10 x 2 = 20 marks**  
**All questions are compulsory. In case of internal choices, attempt any one.**

19. Given set  $aN = \{ax : x \in N, a \text{ is a constant natural number}\}$ . Describe the set  $4N \cap 6N$ .

20. Prove the following :  $\sin 10^\circ + \sin 20^\circ + \sin 40^\circ + \sin 50^\circ = \sin 70^\circ + \sin 80^\circ$ .

21. Solve the quadratic equation  $x^2 + x + \frac{1}{\sqrt{2}} = 0$ .

22. If  $z = x + iy$ , prove that  $|x| + |y| \leq \sqrt{2} |z|$ .

23. Insert If the A.M. between  $p$ th and  $q$ th terms of an A.P. be equal to the A.M. between the  $r$ th and  $s$ th terms of the A.P., show that  $p + q = r + s$ .

**OR**

If  $a^2, b^2, c^2$  are in A.P., then show that  $\frac{1}{b+c}, \frac{1}{c+a}, \frac{1}{a+b}$  also in A.P.

24. Find the points on  $x$ -axis whose distance from the line  $4x + 3y - 12 = 0$  is 8 units.

**OR**

Find the equation of the line whose perpendicular distance from the origin is 4 and the angle which the normal makes with positive directions of  $x$ -axis is  $15^\circ$ .

25. An equilateral triangle is inscribed in the parabola  $y^2 = 4ax$ , where one vertex is at the vertex of the parabola. Find the length of the side of the triangle.

26. Find the point on  $z$ -axis which is equidistant from  $(1, 5, 7)$  and  $(5, 1, -4)$ .

**OR**

Find the coordinates of a point which divides the line segment joining the points  $(5, 4, 2)$  and  $(-1, -2, 4)$  in the ratio  $2 : 3$  externally.

27. (i) If  $y = \sin 2x \cos 3x$  then find  $dy/dx$ .

(ii) If  $y = x^{-4}(3-4x^{-5})$  then find  $dy/dx$ .



28. Find the standard deviation of first n-natural numbers.

**PART B (SECTION IV)**

**7 X 3 = 21 marks**

**All questions are compulsory. In case of internal choices, attempt any one.**

29. In a class of 35 students, 17 have taken Mathematics, 10 have taken Mathematics but not Economics. Find the number of students who have taken both Mathematics and Economics and the number of students who have taken Economics but not Mathematics, if it is given that each student has taken either Mathematics or Economics or both.

30. Find the domain and range of the following function.

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

31. Solve the following for  $x$  and  $y$  :  $(x - iy) (2 + 3i) = \frac{x+2i}{1-i}$

**OR**

Find real  $\theta$  such that  $\frac{3+2i\sin\theta}{1-2i\sin\theta}$  is purely real.

32. The water acidity in a pool is considered normal when the average pH reading of three daily measurements is between 8.2 and 8.5. If the first two pH readings are 8.48 and 8.35, find the range of pH value for the third reading that will result in the acidity level being normal.

33. In an increasing G.P., the sum of the first and last term is 66, and product of the second and last but one term is 128. If the sum of the series is 126, find the number of terms in the series.

34. Find the ratio in which the line segment joining the points (1, 2, 3) and (- 3, 4, - 5) is divided by the XY-plane. Also find the coordinates of the point of division.

35. The mean and standard deviation of 100 observations were calculated as 40 and 5.1 respectively by a student who took by mistake 50 instead of 40 for one observation. What are the correct mean and standard deviation ?

**OR**

Calculate the mean deviation about median for the following data :

Classes	0 - 10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60
Frequencies	6	8	14	16	4	2

**PART B (SECTION V)**

**3X 5 = 15 marks**

**All questions are compulsory. In case of internal choices, attempt any one.**

36. Prove that  $\sqrt{2 + \sqrt{2 + 2\cos 4x}} = 2\cos x, 0 < x < \frac{\pi}{4}$ .

**OR**

If  $\sin x = \frac{3}{5}, 0 < x < \frac{\pi}{2}$ , find the values of  $\sin 2x, \cos 2x, \tan 2x$  and  $\sin 4x$ .

37. A man is running in a race-course notes that the sum of the distances from the two flag posts from him is always 10 m and the distance between the flag posts is 8 m. Find the equation of the path traced by the man.

38. Find the derivative of  $\tan x$  with respect to  $x$  from the first principle.

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**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:- XI**  
**Time:- 3 Hrs.**

**Subject:- Biology**  
**F. M:- 70**

**GENERAL INSTRUCTIONS:-**

- (i) All questions are compulsory.
- (ii) The question paper has four sections: Section A, Section B, Section C and Section D. There are 33 questions in the question paper.
- (iii) Section-A has 14 questions of 1 mark each and 02 case-based questions. Section-B has 9 questions of 2 marks each. Section-C has 5 questions of 3 marks each and Section-D has 3 questions of 5 marks each.
- (iv) There is no overall choice. However, internal choices have been provided in some questions. A student has to attempt only one of the alternatives in such questions.
- (v) Wherever necessary, neat and properly labelled diagrams should be drawn.

**SECTION-A**

1. In a flower, the petals in a whorl just touch one another at the margins, without overlapping. Name the type of aestivation and give one example. (1)
2. Why are viruses described as obligate intracellular parasites? (1)
3. How do cardiac muscle fibres contract as a unit? (1)
4. A ball of snow when rolled over snow increases in mass, volume and size. Is this comparable to growth as seen in living organisms? Why? (1)
5. What is the function of a polysome? (1)
6. Why does oxygen diffuse out of the blood capillaries in the tissues? (1)
7. Give reason why white muscle fibres get fatigued soon? (1)
8. Which type of life cycle in plants shows zygotic meiosis? (1)
9. Urine becomes hypertonic as it flows through the descending limb of Henle's loop. Justify. (1)
10. Name any two factors that affect the binding of CO<sub>2</sub> to haemoglobin. (1)
11. Assertion (A): In molluscs, feather-like gills are present in mantle cavity. (1)  
Reason (R): Gills perform respiratory and excretory functions in molluscs.  
(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) Both A and R are false.

**OR**

Assertion (A): Tube feet expand or contract due to the hydrostatic pressure within it.

Reason (R): Tube feet help to filter the water that enter the water vascular system.

- (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) Both A and R are false.

12. Assertion (A): Glomerular filtration requires expenditure of energy by kidney. (1)

Reason (R): During glomerular filtration, pressure in glomerular capillaries is lower than the pressure in Bowman's capsule.

- (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) Both A and R are false.

13. Assertion (A): Glycolysis is also called EMP pathway. (1)

Reason (R): It is the only process of respiration in aerobic organisms.

- (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) Both A and R are false.

14. Assertion (A): Adrenal medulla is called the gland for 'fight, fright and flight'. (1)

Reason (R): The hormones adrenaline and noradrenaline help the body to combat against stress and emergency conditions.

- (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) Both A and R are false.

15. Read the following and answer **any four** questions from 15(i) to 15(v) given below:  
Polysaccharides are the macromolecules consisting of long chains of sugars. Unlike carbohydrates, they are not sweet and are insoluble in water. The two ends of polysaccharide chains are called reducing and non-reducing ends. Based upon their monomeric units, these are homopolysaccharides and heteropolysaccharides. Depending upon their location, polysaccharides play multiple functions in the living world. Few examples of polysaccharides include cellulose, inulin, chitin etc.

(i) All the listed polysaccharides are homopolymers except

- (a) starch
- (b) glycogen
- (c) chitin
- (d) cellulose

(ii) Inulin is a polymer of

- (a) glucose
- (b) fructose
- (c) glucose + sucrose
- (d) fructose + galactose

(iii) A polysaccharide found in the exoskeleton of crabs is

- (a) cellulose
- (b) pectin
- (c) murein
- (d) chitin

(iv) Which of the following is not a polysaccharide?

- (a) Lactose
- (b) Starch
- (c) Glycogen
- (d) Dextrin

(v) Assertion (A): Starch-  $I_2$  is blue in colour as starch can hold  $I_2$  molecules but cellulose cannot hold  $I_2$ .

Reason (R): Starch is a homopolymer whereas cellulose is a heteropolymer.

- (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) Both A and R are false.

16. Read the following and answer **any four** questions from 15(i) to 15(v) given below: Auxins are a class of plant hormones responsible for various aspects of plant growth. These phytohormones affect cell enlargement and elongation. They also help the plants to respond to sunlight and gravity. In several plant species, auxins help to establish apical meristems and thus, direct the growth of the plant. For this purpose, the distribution of auxins in a plant body is variable, i.e. they are more concentrated in shoot regions as compared to the root region. Auxins occur naturally in plants. Due to their wide applications, these are synthesised in laboratory and used for several purposes in different plants.

- (i) In plants, movement of auxins is
- basipetal
  - acropetal
  - centripetal
  - Both (a) and (b)
- (ii) An example of synthetic auxin is
- 2,4-D
  - IAA
  - NAA
  - All of these
- (iii) Auxins promote
- root formation
  - apical dominance
  - parthenocarpy in tomatoes
  - All of these
- (iv) All the listed phytohormones are plant growth inhibitor, except
- Dormin
  - Ethylene
  - IAA
  - ABA
- (v) Assertion (A): Removal of shoot tips increases apical dominance.  
Reason (R): Auxins promote fruit and leaf drop at early stages.
- Both A and R are true, and R is the correct explanation of A.
  - Both A and R are true, but R is not the correct explanation of A.
  - A is true but R is false.
  - Both A and R are false.

### SECTION-B

- Mention two features in which deuteromycetes resemble ascomycetes. (2)
- Why are stamens of
  - brinjal called epipetalous
  - lily called epiphyllous?
 (2)
- “Both lysosomes & vacuoles are endomembrane structures yet they differ in terms of their functions” Comment. (2)

**OR**

Plasma membrane is described as “protein iceberg in sea of lipids”. Why ?

20. Mention the components of the diffusion membrane of human respiratory system. What is its total thickness? (2)
21. What is the role played by Renin-Angiotensin in the regulation of kidney function? (2)
22. Describe the structure of a thin filament. (2)
23. An animal tissue is found to be actively involved in secretion, absorption and excretion. Identify the tissue and mention its structure, location in human body. (2)
24. State any two methods of locomotion shown by protozoans. Mention them with an example of each. (2)
25. What are the constituents of the limbic system? Mention its functions. (2)

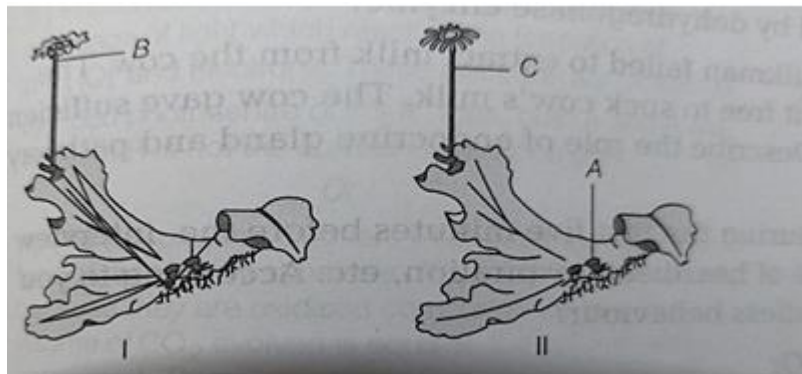
**OR**

State the function of the following:

- a. Cerebrum
- b. Medulla

### SECTION-C

26



- a. Identify the structure A. Also mention the characteristic feature and function of A.
  - b. Considering diagram I and II represent male and female thallus, identify the structures labelled as B and C. (2+1=3)
27. *Petromyzon*, *Scoliodon* and *Labeo* are all fishes but they are placed in three different classes of Chordata. Give reasons. (3)
  28. a. Describe the two decarboxylation steps in Krebs's cycle.  
b. Write the role of oxygen in ETS. (2+1=3)
  29. Explain the mechanism of conduction of nerve impulse within the neuron. (3)
  30. Describe the mechanism of action of a protein hormone. (3)

**OR**

Name the hormones, their source glands and their mode of functioning to achieve calcium homeostasis in the human body.

**SECTION-D**

31. What are the various stages of meiotic prophase-I? Enumerate the chromosomal events during each stage? (5)

**OR**

Mitosis results in the production of two cells, which are similar to each other. What would be the consequence of each of the following irregularities that occur during mitosis?

- a. Nuclear membrane fails to disintegrate.
  - b. Duplication of DNA does not occur.
  - c. Centromere is not divided.
  - d. Cytokinesis does not occur.
  - e. Centrioles are absent.
32. a. Explain the Z-scheme of light reaction (3+2=5)  
b. Cyclic photophosphorylation results in the production of ATPs only. Give reasons.

**OR**

- a. Six turns of Calvin cycle are required to generate one mole of glucose. Explain.
  - b. What adaptations are seen in C<sub>4</sub> plants?
33. Describe the sequence of events which occur in the cardiac cycle. (5)

**OR**

- a. Explain the different segments in a standard ECG.
- b. How is heart attack different from heart failure? (3+2=5)

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# DELHIPUBLIC SCHOOL, RANCHI

ANNUALEXAMINATION :(2020-2021)

Class: XI  
Max Marks: 70

Subject:Computer Science.  
Time: 03 Hours.

**General Instructions:**

- *Technically informative answers will be appreciable.*
- *All questions are mandatory unless alternative is provided.*
- *Marks are indicated against questions.*
- *Programs are to be written in Python language only.*
- *There are 38 Questions, all in total, in Eight Groups: A to H.*
- *In Case Based Integrated Python Programming Questions, add documentation also.*

## GROUP-A (Any TEN) [10 Marks]

- Q1)** Identify the valid declaration of test: test=['Java' ,12, 'Average', 25.45] :
- (a) Tuple (b) Dictionary (c) List (d) String
- Q2)** Identify the valid declaration of test: test=['Python' ,10, 'Good', 25.45,[12,22,43]] :
- (a) nested Tuple (b) nested Dictionary (c) nested List (d) nested String
- Q3)** Evaluate the following expressions: (i)  $47 // 5 + 10 ** 2 - 25 + 12 \% 5$   
(ii)  $34 > 56$  or  $90 > 60$  and not  $21 > 10$
- Q4)** A tuple is declared as T1 = (5,15,20,35) then Predict the output of :  
print(sum(T1)+min(T1)) ?
- Q5)** A tuple is declared as T1 = (5,15,20,35) then Predict the output of :  
print(max(T1)+min(T1)) ?
- Q6)** A list is given as Age=[10, 20,30,40,50,60] , What will be displayed as Age[:2] + Age[2:]
- Q7)**A list is given as Age=[10, 20,30,40,50,60] , What will be displayed as Age[-2] + Age[1]
- Q8)**Provide Result of the expression :  $2+9*((3*12)-8)/10$  (a) 25.4 (b) 27.2 (c) 72.0 (d) 7.40
- Q9)**What is the value of the expression?  $37 \% 5 ** 2 * 4 // 3$  (a) 4 (b) 14 (c) 15 (d) 16
- Q10)** What will be the value of the expression?
- (i)  $((12 + 10 * 30) \% 10) ** 4 // 3$  (a) 4 (b) 5 (c) 2 (d) 3
- (ii)  $(12 \% 10 \% 3) ** 3 * 5 // 2$  (a) 4 (b) 20 (c) 18 (d) 12
- Q11)**Following set of commands is executed in shell, what will be the output?
- (i) print("corona virus" [4 : 8]) : (a) ona (b) na v (c) coro (d) ona v
- (ii) print("corona virus" [2: 5:3]) : (a) n (b) r (c) i (d) o

**Q12)** Which of the following operators, has the Lowest precedence ?

- (a) not    (b) %    (c) and    (d) +

**GROUP-B**

**Q13)** In the given **Matrix**, Fill All the **Cells (Boxes)** with Relevant Numbers: **[4]**

Decimal	Binary	Octal	Hexadecimal
202.375			
	10110111.011		
		36746.3	
			FACE

**Q14)** Add these Binary numbers: (a) 111010101. 111, 10110101.1011 and 11011101.11 **[2]**  
(b) 1110110101. 1010, 11.11 and 101101111.001

**Q15)** (i) What Negative value in decimal, does  $(1001\ 1011)_2$  represent ? **[2]**  
(ii) Express  $(-17)_{10}$  in two's Complement form.

**GROUP-C(Any Three) [2 X 3]**

**Q16)** Trace and write the output of the following Python codes :

```
(i) D = { 'a' : 2, 'b' : 3, 'c' : 5 }  
    E = { }  
    for c in D:  
        E[D[c]] = c  
    print (E)  
  
(ii) T1 = (6, 12, 18, 24, 30)  
      T1 = T1 + (1,)   
    print (T1)  
      T1 = T1[:5] + (3, 6, 9) + T1[:3]  
    print (T1)
```

```

(iii)
for i in range(0,k):
if (s[i].isupper()):
m=m+s[i].lower()
elif (s[i].isalpha()):
m=m+s[i].upper()
else:
m=m + '$$'
print(m)
fun('Computer@Science')

```

```

(iv) Txt = "Mind@Work!"
S = ''
for i in range (0, len(Txt)) :
    if (Txt [i] . isalpha () == False):
        S += '*'
elif (Txt [i] .isupper() ) :
    S += chr (ord(Txt [i] ) + 1 )
else:
S += Txt [ i+1]
print (S)

```

#### GROUP-D

**Q17)** Rewrite the following code in Python after removing all syntax error(s). Underline each correction done in the code : **[2]**

```

Num==50
whileNum>= 10
if NUM =30:
BREAK :
ElifNum>30:
print(Num)
else:
print (Num //10)

```

**Q18)** With Justifications, Provide the Output for the following Code Segment : **[2]**

```
import math
import random
print ( math.ceil ( random.random ( ) ) )
```

**Q19)** Given Code contains an endless Loop. Could you find out, why? Suggest a Solution. **[2]**

```
A = 10
Ans = 1
while ( A > 0 ) :
    Ans = Ans + A ** 3
    A = A + 3
print ( Ans )
```

**Q20)** Differentiate between LIST & TUPLE in Python. What happens, when an element gets deleted from a List ? **[2]**

**Q21)** Along with example, define DICTIONARY in Python. Can Tuples be used as keys in Python Dictionaries? Briefly, explain. **[2]**

**GROUP-E**

**Q22)** Write Python code to show the following outputs (Any Three): **[2X3=6]**

(i)	(ii)	(iii)	(iv)
@	5 4 3 2 1	3	A
@@	5 4 3 2	3 5	BC
@@@	5 4 3	3 5 7	DEF
@@@@	5 4	3 5 7 9	GHIJ
@@@@@	5	3 5 7 9 11	KLMNO

**GROUP-F**

**Q23)** Draw Logic Circuit for the following Expression :

$$\text{Exp} = A'.B.C. (A + D)';$$

Now, Put the values A=0, b=1, C=1 and D=1, Find the resulting Output. **[2]**

**Q24)** Define **XNOR** Gate. Draw the Circuit Diagram for **FN = (A' + B) . (B + C')** ; using NOR Gates only. **[2]**

**Q25)**In the Boolean expression, with example, define “ Maxterms ”. Find the canonical minterms of :  $B.C.D + B.C + A$  . [2]

**Q26)** Simplify algebraically (mentioning Names of postulates)& then draw the Logical Circuit of resultant simplified expression. Exp:  $A(X.Y' .(Z +Y.U) + X'.Y').Z$  ; [2]

**Q27)** State the Principle of **Duality** and Give the Dual of :  $A + A'.B$  [1]

**OR**

State and verify **Absorption Laws** of Boolean Algebra by Truth **Table**.

**Q28)** What do you mean by the terms: Tautology & Fallacy. If the given Sentence is correct, write “Correct “. If not, write the correct sentence. Given Sentence is: “Contradictions are tautologies & Postulates are fallacies “. [1]

**OR**

Mention Names of Universal Gates. Why they are called Universal?

#### **GROUP-G**

**( Case / Source Based Integrated Questions / Any TWO) [4 X 2]**

**Q29)** A bank is a financial institution which is involved in borrowing and lending of money. With advancement in technology, online banking, also known as internet banking, allows customers of a bank to conduct a range of financial transactions through the bank’s website anytime, anywhere.

The basic two operations performed on an account are Deposit and Withdrawal. Write a menu-driven program that accepts either of the two choices of Deposit and Withdrawal, then accepts an amount, performs the transaction and accordingly displays the balance.

The program should display the following options as:

- Open a savings bank account
- Add a customer
- Deposit money
- Displaying the sorted records
- Closing / deleting the account.

**Q30)** Pathshala Gurukul conducts physical training camps for the physical well-being of its students. This camp is held for one week on the outskirts of the city. The entire group of students is represented as a list. The list stores the roll numbers of the participants for

camp activities. As part of this training, the entire stream of students is divided into two halves. When the first group of students goes for physical training, the other half goes for aerobics classes and in the later half these groups are swapped.

Write a Python program that maintain and display details about the swapping of activity classes and award them stars on completion of each activity.

**Q31)** Kids DPSR, is a play-way school that focuses on 'Play and learn' strategy that helps toddlers understand concepts, in a fun way. Being a senior programmer, you have taken responsibility to develop a program using user-defined functions to help children, differentiate between uppercase and lowercase letters/ English alphabets in a given sentence. Make sure that, you perform a careful analysis of the type of alphabets and sentences that can be included as per age and curriculum.

Write a Python program that accepts a string and calculates the number of uppercase and lowercase letters.

#### **GROUP-H**

**Q32)** Sahrukh wanted to gift his friend a football or a wrist watch. So he searched for many sports items and wrist watches online. After that everything he goes online, his web browser shows him advertisement about sports items and wrist watches. **[2]**

- (a) Why is this happening?
- (b) How could have Sahrukh avoided them?
- (c) How can Sahrukh get rid of this now?

**Q33)** In this Cyber world, What measures should one take to avoid & maintain confidentiality of Personal Information? **[2]**

**Q34)** What are the possible causes that contribute to Gender and Disability issues? **[2]**

**Q35)** Name two threats to security in a network. What is the role of Firewall in Network Security? **[2]**

OR

Write brief Note on ITA-2000. How is this Law implanted in India ?

**Q36)** Mention few ( at least Four) common forms of student's Plagiarism. **[2]**

OR

Distinguish between Hacker & Cracker, with example.

- Q37)** Ahilya is down with fever. She decides not to go to school the next day. Next evening she calls up her classmate, Sabhya, and enquires about the Computer class. She also requests her to explain the concept. Sabhya says, “Mam taught us how to use dictionary in Python”. Further, she politely says, “Give me some time, I will email you the material which will help you understand dictionary in Python.” Sabhya quickly downloads a 2-minute clip from the internet explaining the concept of dictionary in Python. Using video editor, she adds the text “Prepared by Sabhya” in the downloaded video clip. She then emails the modified video clip to Ahilya. This act of Sabhya is an example of: **[1]**
- (a) Fair use                      (b) Hacking  
(c) Copyright infringement   (d) Cybercrime

- Q38)** After a fight with your friend, you did the following activities. Which of these activities is not an example of cyber-bullying? **[1]**
- (a) You sent an email to your friend with a message saying, “I am sorry”.  
(b) You sent a threatening message to your friend saying, “Do not try to call or talk to me”.  
(c) You created an embarrassing picture of your friend and uploaded on your account on a social networking site.

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# DELHI PUBLIC SCHOOL

## SAIL Township, Ranchi

Annual Examination 2021

**Class: XI**  
**Max Marks: 70**

**Subject: Informatics Practices (065)**  
**Time: 3 Hours**

### General Instructions:

- There are 4 groups A, B, C, D
- Group A contains 21 marks Objective type.
- Group B contains 10 marks of 2 questions (5X2) case studies types
- Group C contains of 24 of 2 marks each (2X12=24)
- Group D contains of 15 of 3 marks each (3X5=15)
- Always keep margin at the left side of your answer script & clearly write the Question Numbers
- Try to maintain the order of the questions in each group during answering.
- Keep spaces and mark 'line-of-separation' in between two answers.

### GROUP – A

[21 marks]

**Q1. Answer the following questions (Objective type):**

**[21X1=21]**

- (a) \_\_\_\_\_ is a 2GL that converts the language into machine language. (i) Binary (ii) Assembly (iii) Programming (iv) Database
- (b) Python also works as a \_\_\_\_\_ on shell. (i) Database (ii) Calculator (iii) Programming (iv) None
- (c) Which operator gives integer quotient of division of any two numbers? (i) / (ii) // (iii) % (iv) ^
- (d) Which of the following increases speed the data flow? (i) CACHE (ii) ROM (iii) RAM (iv) CPU
- (e) \_\_\_\_\_ Operator works as raise to the power. (i) pow() (ii) ^ (iii) \*\* (iv) tothepower()
- (f) Which stores the record information in the disk? (i) Memory (ii) ROM (iii) RAM (iv) FAT
- (g) The : (colon) works \_\_\_\_\_ (i) Before if...else (ii) After while (iii) Before for (iv) None
- (h) Parallelogram is the flowchart symbol of \_\_\_\_\_. (a) Decision making (b) Input (c) Calculation (d) Print  
Choose the correct one: (i) Only a (ii) Only b (iii) Both a & b (iv) Both b & d
- (i) The \_\_\_\_\_ operator gives TRUE output when both of the conditions are correct.
- (j) In typecasting to convert float value of y into int x is: \_\_\_\_\_  
(i) x=float(y) (ii) x=int(y) (iii) int(x)=y (iv) float(y)=x
- (k) Number of rows and Number of column in a table is simultaneously are:  
(i) Degree & Cardinality (ii) Cardinality & Degree (iii) Attribute & Tuple (ii) Tuple & Attribute
- (l) The range() function operates by default to take value \_\_\_\_\_  
(i) from 1 to n (ii) from 0 to n (iii) from 1 to n-1 (iv) from 0 to n-1
- (m) The difference between continue and break operators is/are \_\_\_\_\_ :  
(i) continue takes counter to the beginning & break stops execution  
(ii) continue takes counter to the condition & break breaks the block  
(iii) continue takes counter to the condition & break terminates loop  
(iv) continue takes counter next to the condition & break dismisses the block



- (n) Negative index starts from: \_\_\_\_\_  
 i) 1 and Right to Left ii) 0 and Left to Right iii) 1 and Left to Right iv) 1 and Right to Left
- (o) Flowchart depicts the \_\_\_\_\_ representation of the programming logic.
- (p) Find the output of the following code:

```
import numpy as np
lst=[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]
arr = np.array(lst)
x=arr.reshape(4, 3)
print(x)
```

- (i) [[ 1 2 3]  
 [ 4 5 6]  
 [ 7 8 9]  
 [10 11 12]]
- (ii) [[ 1 2 3 4]  
 [ 5 6 7 8]  
 [ 9 10 11 12]]

- (iii) [1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12]      (iv) None

(q) Say x=[2, 3, 4, 5, 6] & statement n=len(x) gives the output: \_\_\_\_\_

- (i) 5      (ii) 20      (iii) None      (iv) Both i & ii

(r) List is \_\_\_\_\_:

- (i) Homogeneous and Mutable      (ii) Heterogeneous & Immutable  
 (iii) Homogeneous and Immutable      (iv) Heterogeneous & Mutable

(s) In 2D Array a value is located by its: \_\_\_\_\_

- (i) Row Number & Column Number      (ii) Row Index & Column Number  
 (iii) Row Number & Column Index      (iv) Row Index & Column Index

(t) Here is a list lst=[10,20,30,40,50]. After executing the statement: lst.append(60) the output will be:

- (i) [60, 10, 20, 30, 40, 50]      (ii) [10,20,30,40,50,60]  
 (iii) [10,20,30,60,40,50]      (iv) [10,20,30,40,50,60]

(u) AI technology is made on \_\_\_\_\_

- (i) Super intelligence      (ii) Human like digital brain  
 (iii) Man made thinking power      (iv) 6GL

## GROUP-B

[10 Marks]

**Q2. Write SQL Commands of the following queries based on table Student:**

**[5X1=5]**

<u>STUDENT</u>				
AdmNo	Name	Class	DOB	Average
A001	AMIT	11	2002-02-22	98.00
C010	SUMIT	10	2001-10-25	95.00
B004	RAHIM	11	2003-01-01	91.25
D111	MAHIMA	12	2001-12-30	100.00
A011	RASHI	11	2003-09-23	86.98

- (a) Display the records those are of class 11.
- (b) Display the records those have average in between 80 to 95.
- (c) Increase the average by 3 marks those have less than 60.
- (d) Display Name, Class & Average of those, whose name's 2nd character is 'A'.
- (e) Display the records in descending order on Average marks.

**Q3. Write code to perform the following:**

**[5X1=5]**

Here is a list  $x = [20, 30, 40, 50, 60]$ . Now write the command as asked below on the same list  $x$ :

- (a) Display the element 30
- (b) Display the elements from 30 to 50
- (c) Display the elements from 30 to last, using -ve index
- (d) Replace the element 30 by 10
- (e) Display all the elements using for loop

### GROUP-C

**[24 Marks]**

***[Attempt any 12 questions out of 15]***

**Q4. Answer the following questions:**

**[12X2=24]**

- (a) Write the difference between 3GL & 4GL. [2]
- (b) Write the difference between System software and Application software. [2]
- (c) Show the steps to find the final output (T/F) of the following statement, if  $x=10$ ,  $y=20$  &  $z=30$ . [2]
  1.  $!(((x<=y) \&\& (y!=z)) \|\| (! (z==x) \&\& (y>=z)))$
- (d) Explain the difference between (i) / & % operators (ii) = & == operators [2]
- (e) Write an Algorithm to enter a number and show the number is Odd or Even. [2]
- (f) Draw a flowchart to find  $s=1! + 2! + 3! + \dots$  Nth term [2]
- (g) Draw a flowchart to enter a number and check the number is Prime or not. [2]
- (h) Write a note on 'A threat of Digital waste & its management'. [2]
- (i) Describe the functionality of Disk Memory Management with a help of a diagram. [2]
- (j) Write two important objectives for management of a Smart City. [2]
- (k) Define: (i) Cloud Computing & (ii) Internet Of Thinking (IOT) [2]
- (l) Write the difference between ROLLBACK & COMMIT of SQL commands. [2]
- (m) Explain the functions of Wild Card in MySQL with examples. [2]
- (n) Explain the difference between the commands (with example): [2]
  - (i) `print(np.sort(arr, axis=0))`
  - (ii) `print(np.sort(arr, axis=1))`

(o) Here is a dictionary of different points scored by different students. [2]

{'Rohan' : 489 , 'Kaushik' : 477 , 'Kritika' : 488 , 'Sujit' : 465 , 'Rahim' : 478 }

Now what to write to:

- (i) Change the point/value 489 with 498 of Rohan
- (ii) Print the point/value of Sujit

**GROUP – D**

**[5X3=15 Marks]**

***[Attempt any 5 questions out of 7]***

**Q5. Write a Python program of the followings (Any Three):**

(a) Enter a number and find reverse of the same. [3]

(b) Create a list then take an element from the user and search out whether it is present in the list. [3]

(c) Find the sum of the elements of each row of the following list:

`x=[[1,2,3], [4,5,6], [7,8,9]]`

(d) Write a Python program to create a Dictionary Class of n times of the items, by inputting Section as the key and 5th subject as the corresponding value of the key, and finally display the items under a caption: SECTION & 5th SUBJECT. [3]

(e) Create a NumPy 2D array of the following data and display as given: [3]

`Lst=[ [10,20,30,40,50] , [11,22,33,44,55] , [11,12,13,14,15]]`

10 20 30 40 50

**11 22 33 44 55**

11 12 13 **14 15**

(i) Display the whose 2<sup>nd</sup> row

(ii) Display last three elements of the 2<sup>nd</sup> & 3<sup>rd</sup> rows (i.e. 33, 44, 55, 13, 14, 15)

(f) Write SQL commands of the followings based on the given data of **Customer** table: [3]

<b>Column Name=&gt;</b>	Cust_Id	Cust_	Name	DateOfPkg	Pincode	Price	Phone
<b>Data Type=&gt;</b>	Number		Varchar	Date	Integer	Decimal	Integer
<b>Length=&gt;</b>	7		30		6	8,2	10
<b>Constraints=&gt;</b>	Primary				Default		
	Key				462030		
	Not null						

(i) Create table Customer as per above table instance chart.

(ii) Insert a record with relevant information in the table.

(iii) Increase salary of employee's records by 10% ( (10/100)\*Price).

(g) Write SQL commands of the followings based on the above **Customer** table: [3]

(i) Display the records in ascending order on price which have price more than Rs. 500.00

(ii) Delete the records those Pincode is 834004.

(iii) Display the records those Year of packaging is before 2010.

**###**



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class-XI**  
**Time: 3 hrs**

**Subject: Engineering Graphics**  
**M.M:70**

**GENERAL INSTRUCTIONS:** Attempt all the questions. Use both sides of drawing sheet if necessary. All dimensions are in millimeters. Missing and mismatching dimensions, if any, may be suitably assumed. Follow the SP 46.2003 revised code (with first angle method of projection).

**1. Answer the following multiple choice questions: [5X1=5]**

- i. An equilateral triangle has all sides:
  - a) Perpendicular
  - b) Parallel
  - c) Equal
  - d) None
- ii. An octagon has:
  - a) 4 sides
  - b) 8 sides
  - c) 7 sides
  - d) None
- iii. A radius is:
  - a)  $\frac{1}{2}$  of diameter of circle
  - b)  $\frac{1}{4}$  of diameter of circle
  - c) Equal to diameter of circle
  - d) None of them
- iv. A tangent touches a circle?
  - a) 4 points
  - b) 1 point
  - c) 2 points
  - d) None
- v. The function of an eraser is to?
  - a) Enlarge lines
  - b) Measure lines
  - c) Remove lines
  - d) None

2. Point 'A' is 15 mm above the H.P and in the V.P. Draw the projections. Give the dimensions. **[3]**

3. A point 'B' is 20 mm in front of the V.P. and in the H.P. Draw the projections. Give the dimensions. **[3]**
4. A 50 mm long straight AB is parallel to both H.P. and V.P. Line is 20 mm in front of the V.P. and 20 mm above the H.P. Draw the projections **[5]**
5. Draw regular pentagon in a circle of 30 mm side. Give the dimensions. **[5]**
6. a. Construct an isometric scale. **[4]**
- b. A circle of 50 mm diameter, draw its isometric projections. It is in horizontal position. Give the dimensions. **[5]**
7. Draw four equal circles in a square. Side of square is 60 mm. Give the dimensions. **[10]**
8. Draw the projections of a regular hexagon of 25 mm side, having one of its sides in H.P. and its surface making an angle of  $45^\circ$  with the H.P. Give the dimensions. **[10]**
9. Draw the projections of hexagonal pyramid, base side 30 mm, height of the axis 50 mm, having its base on the ground and an edge of the base parallel to the V.P. Also draw its side view. Give the dimensions. **[10]**
10. A pentagonal pyramid, base 30 mm and axis 65 mm long, has its base horizontal and an edge of the base parallel to the V.P. A horizontal section plane cuts it at a distance of 25 mm above the base. Draw its front view and sectional top view. Give the dimensions. **[10]**

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# DELHI PUBLIC SCHOOL, RANCHI

HALF YEARLY EXAMINATION 2020- 2021

Class:- XI

Subject:- Fine Art- Graphics / Painting

Time- 2 Hrs.

Maximum Marks: 30

## Section: First

*Answer to be written for each question in a word or sentence.*

*(1x6 = 6)*

- I. (a) Which of the following is a marble sculpture?
- (i) Yakshini
  - (ii) Nataraj
  - (iii) Mother & child
  - (iv) Seated Buddha from Sarnath
- (b) Write an example of the Vasera style of Architecture.
- (i) Dilwara temple, Rajasthan.
  - (ii) Kendriya Mahadev Temple, Khajuraho.
  - (iii) Kailash Temple, Ellora.
  - (iv) Gol Gumbaj, Bijapur
- (c) Vihara caves of Ajanata were used for \_\_\_\_\_ purpose?
- (d) Prehistoric paintings were done inside the cave only in the time of-
- (i) 400000 to 10000 B.C
  - (ii) 10000 to 3000 B.C
  - (iii) 4500 to 300 B.C
  - (iv) 2600 to 1900 B.
- (e) Indian Monalisa sculpture of Mauryan period is from which place?
- (i) Mathura, Uttarpradesh
  - (ii) Didarganj, Patna
  - (iii) Sarnath, Varanasi
  - (iv) Raisen district, Madhya Pradesh
- (f) Which Architecture is called Whispering gallery of Bijapur?

## Section: Second

*The answer to be written for each is about 30 words. (Any Three)*

*(2x3 =6)*

- (a) What are the basic differences between Buddha and Mahavir sculpture?
- (b) Describe the technique of Ajanta cave paintings.
- (c) Mention the medium, period, dynasty, location of 'Ravana shaking Mt. Kailash' and 'Lion Capital'.
- (d) What is the meaning of Monolithic (related to sculpture) and Moksha (related to the temple).

**Section: Third**

*The answer to be written for each is about 100 words. (Any Two)*

*(3x2 =6)*

- (a) Write a short note on Descent of Ganga.
- (b) Describe the Qutab Minar, Delhi.
- (c) What is the difference between the sculpture of seated 'Buddha from Katra tila' (Mathura) and 'Seated Buddha from Sarnath'.
- (d) Write a short note on a famous sculpture of 'Black Pagoda' according to your syllabus.

**Section: Fourth**

*The answer to be written for each is about 200 words. (Anyone)*

*(6x1 =6)*

4. (a) How do you understand Cave Painting? What were the purpose and subject of cave paintings?
- (b) Describe the compositional arrangement of Nataraj of the Chola period and its casting process.
- (c) Write a brief note on Padmapani Boddhisatva of Ajanta.

**Section: Fifth**

*The answer to be written for each is about 300 words. (Anyone)*

*(6x1 =6)*

5. (a) Describe the artistic features of Taj Mahal, Agra. What is the difference between Indo-Islamic Architecture and Hindu Temple?
- (b) Describe in detail the importance of the Indus Valley Civilization.

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**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

Class:- XI  
Time:- 3 Hrs.

Subject:- Accountancy  
F. M:- 80

**GENERAL INSTRUCTIONS:-**

1. There are 32 questions. All questions are compulsory.
2. Question No. 1 to 20 are very short answer type questions carrying 1 marks each.
3. Answer of each part should be written at one place. It should be brief and to the point.

- 
1. **The amount of money that is owed by an outsider is a/an** [1]
    - a) Asset
    - b) Liability
    - c) Expense
    - d) Capital
  2. **Fixed assets and Current assets are categorised as per concept of** [1]
    - a) Going concern
    - b) Separate entity
    - c) Consistency
    - d) Conservation
  3. **Book keeping means :-** [1]
    - a) Keeping books
    - b) Recording in books
    - c) Recording of business transactions in the books
    - d) All of the above
  4. **Current Liabilities do not include :** [1]
    - a) Sundry Creditors
    - b) Bills Payable
    - c) Outstanding Salary
    - d) Prepaid Insurance
  5. **The limitations of accounting are** [1]
    - a) Influenced by personal judgments
    - b) Based on historical costs
    - c) Affected by window dressing
    - d) All of these
  6. **In Cash basis, expenses are recorded** [1]
    - a) When paid in Cash
    - b) When not paid in Cash
    - c) When paid or not paid in Cash
    - d) None of the above



7. **Income is measured on the basis of :** [1]
- a) Consistency Concept
  - b) Matching Concept
  - c) Cost Concept
  - d) None of the above
8. **As per Dual Aspect Concept :** [1]
- a)  $\text{Assets} = \text{Liabilities} - \text{Capital}$
  - b)  $\text{Assets} = \text{Capital} - \text{Liabilities}$
  - c)  $\text{Assets} = \text{Liabilities} + \text{Capital}$
  - d)  $\text{Capital} = \text{Assets} + \text{Liabilities}$
9. **Loss of Machine by fire should be credited to** [1]
- a) Profit & Loss A/c
  - b) Machine A/c
  - c) Loss A/c
  - d) Sales A/c
10. **Paid to Ajay on behalf of Vijay Rs. 10000 will be debited to** [1]
- a) Ajay's Personal A/c
  - b) Vijay's A/c
  - c) Drawing's A/c
  - d) Cash A/c
11. **Mohan draws a 40 days bill on Sohan on 20<sup>th</sup> January 2021. The bill matures on** [1]
- a) March 1 2021
  - b) March 3 2021
  - c) March 4 2021
  - d) None of these
12. **On payment of noting charges to the Notary Public the holder of the bill will credit** [1]
- a) Acceptor's A/c
  - b) Noting Charges A/c
  - c) Cash A/c
  - d) None of these
13. **On 01.07.2019 Mr. A purchased a car for Rs. 1000000 CGST and SGST are paid @ 9% each. Depreciation is provided @ 20 % p.a on DBM on 31<sup>st</sup> March every year. The amount of depreciation on Car on 31.03.2020 will be** [1]
- a) Rs. 177000
  - b) Rs. 200000
  - c) Rs. 236000
  - d) Rs. 150000

**14. Rs. 10000 paid as rent for the residential house of proprietor were debited to rent account Rs. 1000. In the rectifying entry Drawing A/c should be debited with [1]**

- a) Rs. 10000
- b) Rs. 1000
- c) Rs. 9000
- d) Rs. 11000

**15. Rectifying entry of purchase book being undercast is passed through\_\_account (fill in the blank) [1]**

**16. If Capital at the end is Rs. 40000, Capital introduced during the year Rs. 30000, drawings for the year Rs. 20000 and loss for the year Rs. 60000, Capital in the beginning will be [1]**

- a) Rs. 10000
- b) Rs. 70000
- c) Rs. 80000
- d) Rs. 90000

**17. Limitation of Computer System is [1]**

- a) Versatility
- b) Accuracy
- c) Decision making
- d) Storage

**18. Net profit of a firm before charging manager's commission is Rs. 21000. If manager is entitled to 5% commission of net profit after charging such commission . How much manager will get as Commission? [1]**

- a) Rs. 1050
- b) Rs. 1000
- c) Rs. 2100
- d) Rs. 2000

**19. Single entry system cannot be maintained by [1]**

- a) Joint Stock Company
- b) Partnership
- c) Sole Proprietorship
- d) All of these

20. If Sales are Rs. 60000 and the rate of gross profit on Cost of goods sold is 25%. Cost of goods sold will be [1]
- a) Rs. 45000  
 b) Rs. 50000  
 c) Rs. 48000  
 d) None of these

21. What are provisions? Write two differences between provisions and reserves? [3]

22. Trial Balance as on 31.03.2020

Particulars	Dr. Amount (Rs.)	Cr. Amount(Rs.)
Machinery	100000	
Provision for Depreciation on Machinery	-	20000
9 % Fixed Deposit (01.04.2019)	100000	-
Interest on Fixed Deposit		6000

Adjustments :-

Depreciate Machinery by 20% p.a. on WDVM . How will you disclose the above information in Final Accounts of a trading concern for the year ended 31.03.2020. [3]

23. Pass journal entries in the books of Jain Brothers. Ranchi [4]

2021 Jan 1	Goods purchased for cash Rs. 100000. Cash discount received @ 10% GST 12% (goods purchased from Patna).
Jan 5	Goods sold for cash Rs. 50000 Cash discount allowed @10% , GST 12 %
Jan 10	Car purchased Rs. 600000 GST 28%. Payment made by cheque
Jan 20	Salary paid Rs. 45000 after deducting tax @ 10 %

24. On 01.07.2020 A sold goods to B for Rs. 20000 GST 12% and received an acceptance for 2 months. On 03.07.2020 A discounted the bill with bank at Rs. 21000. On due date B paid the amount of bill. Pass journal entries in the books of A and B. [4]

25. Trial Balance as on 31.03.2020

Sundry Debtors	31000	-
Provision for Bad Debts	-	1000
Bad Debts	200	-
Cash at Bank	5000	-

Adjustments :-

- i. A bill of Rs. 20000 discounted with bank dishonoured.
- ii. Further Bad Debts amounted to ₹ 1000
- iii. Provision for bad & doubtful debts increased to 5% of debtors

How will you disclose the above information in Final Accounts of a Trading concern for the year ended 31.03.2020. [4]

**26. Trial Balance of A did not agree and put the difference to Suspense account.**

**Following errors are discovered.**

- (i) Sales Return book overcast by **Rs. 8000**
- (ii) Purchase Return to B **Rs. 3000** was not posted to his account
- (iii) Installation charges on new Machinery purchased **Rs. 1750** were debited to Sundry expenses account as **Rs. 175**
- (iv) Rent paid for residential accommodation of A (the proprietor) **Rs. 5200** was debited to rent account as **Rs. 5000**

[4]

**27. What do you mean by Computerised Accounting System. Write two features of computerised accounting system. Write three differences between Manual and Computerised Accounting System.**

[4]

**28. Prepare Bank Reconciliation Statement on 31.03.2020**

- i Overdraft balance as per Pass Book Rs. 105000
- ii Three cheques of Rs. 5000, Rs. 6000 and Rs. 7000 issued on 29<sup>th</sup> March , 30<sup>th</sup> March and 31<sup>th</sup> March 2020. Second cheque was presented for payment on 01.04.2020.
- iii A cheque of Rs. 5600 deposited into bank , recorded in Cash Book of Rs. 6500.
- iv A bill of 10000 discounted with bank @ 5% , full amount recorded in bank column of cash book.
- v Bank charges Rs. 500 recorded in Cash book twice.
- vi Interest on overdraft Rs. 5000 recorded on the Dr side of cashbook
- vii A cheque of Rs. 7000 issued to creditors dishonoured on technical ground
- viii Interest on investment collected by bank not recorded in cash book Rs. 6000
- ix Credit side of Cash book overcast by Rs. 1000
- x Insurance premium paid by bank Rs. 4000 not recorded in Cash book

[6]

**29. Record the following transactions in Double Column Cash Book (cash with bank column) 2021**

- Jan 1 Cash in hand ₹ 15000 Cash at bank Rs. 10000 (Cr.)
- Jan 3 Dividend collected by bank Rs. 20000
- Jan 5 Bank charged commission Rs. 500
- Jan 7 Goods sold for cash Rs. 10000 GST 12%
- Jan 9 Goods purchased for cash Rs. 5000 Gst 12%
- Jan 11 Rent paid in advance by cheque Rs. 10000
- Jan 13 A cheque of Rs. 50000 received from debtors and deposited into bank
- Jan 15 Paid for advertisement by cheque Rs. 10000
- Jan 17 Stationery purchased Rs. 3000
- Jan 19 Wages paid Rs. 4000

[6]

30. Mohan Singh maintains his accounts on Single Entry System. Following information is available

[6]

Particulars	01.04.2019 (Rs.)	31.03.2020 (Rs.)
Sundry Debtors	120000	170000
Sundry Creditors	35000	44000
Buildings	225000	365000
Furniture	50000	60000
Stock	210000	190000
Cash in hand	30000	40000
Land	500000	500000
Machinery	200000	300000

During the year he introduced additional capital of Rs. 600000 and withdrew Rs. 10000 p.m for household expenses . Calculate his profit / loss for the year ended 31.03.2020 after considering following adjustments.

- i Provision for doubtful debts created @ 10% in debtors
- ii Building and Furniture depreciated by 10% and 5% respectively
- iii Outstanding Salary Rs. 10000
- iv Prepaid fire insurance premium Rs. 5000

31. On 01.04.2016 Mr. A purchased a Machine for Rs. 100000. Additions were made on 01.10.2016, 31.03.2017 and on 01.07.2017 for Rs.200000, Rs. 300000 and Rs. 400000 respectively. On 01.01.2018 first machine met with an accident and insurance company admitted the claim for Rs.50000 in full settlement. Scrap realised Rs. 5000 on 31.12.2018, second machine was sold at a profit of 20 % on selling price. On 01.01.2020, third machine was sold for Rs. 150000. Depreciation is provided on machine @ 10% p.a on WDVM on 31<sup>st</sup> March every year .

Prepare Machine Account for four years ended on 31.03.2020. Calculation be made nearest to rupee. Book closed on 31<sup>st</sup> March every year. [8]

**32. Trial Balance as on 31.03.2020**

[8]

<b>Particulars</b>	<b>Amount (Rs.)</b>	<b>Particulars</b>	<b>Amount (Rs.)</b>
Drawings	45000	Capital	400000
Plant & Machinery	80000	Sales	1600000
Purchases	1160000	Sundry Creditors	120000
Carriage inward	20000	Bills Payable	90000
Return inward	40000		
Wages	80000		
Salaries	110000		
Printing and Stationery	8000		
Advertisement	12000		
Trade expenses	6000		
Rent and taxes	14000		
Sundry Debtors	250000		
Bills Receivable	50000		
Investments	150000		
Discount	5000		
Cash at Bank	160000		
Cash in hand	30000		
	2210000		2210000

**Prepare Trading and Profit and Loss Account for the year ended 31.03.2020 and a Balance Sheet as on that date after taking into consideration the following adjustments:-**

- i. Stock on 31.03.2020 Rs. 260000 (market value Rs. 400000)
- ii. Salary due for one month
- iii. Wages paid in advance for four months
- iv. Accrued interest on investment Rs.10000
- v. Allowed interest on Capital @ 6% p.a



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:- XI**  
**Time:- 3 Hrs.**

**Subject:- Business Studies**  
**F. M:- 80**

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**GENERAL INSTRUCTIONS:-**

1. This question paper contains 34 questions
  2. Marks are indicated against each question
  3. Answer should be brief and to the point
  4. Answers to the questions carrying 3 marks may be from 50 to 75 words
  5. Answers to the questions carrying 4 marks may be 150 words
  6. Answers to the questions carrying 6 marks may be 200 words
  7. Attempt all parts of a question together.
- 

1. This form of public sector enterprise is brought into existence by a Special Act of the Parliament.
  - a. Government Company
  - b. Statutory Corporation
  - c. Departmental Undertaking
  - d. None of the above [1]
2. Harshit has started a website to establish his digital marketing firm. He seeks to associate with the individuals and firms who wish to promote their business online. Through the website the clients are free to purchase any promotional package, to make toll free calls for queries and lodge complaints around the clock at no extra cost. The component of e-business being highlighted through the facilities provided to the clients on this website is...
  - a. C2C Commerce
  - b. B2B Commerce
  - c. Intra B Commerce
  - d. B2C Commerce [1]
3. Ria works as a designer with a famous brand. She says that there is no standardisation of work as the likes and requirements of each customer is different. Therefore, every order is unique. Identify the feature of services being highlighted above.
  - a. Inconsistency
  - b. Inseparability
  - c. Involvement
  - d. Intangibility [1]

4. Which of the following is not the responsibility of business towards the workers?
- a. Provide opportunities to the workers for meaningful work
  - b. Offer right quality and quantity of goods and services
  - c. Ensure good working conditions
  - d. Confirm a fair wage to its workers [1]
5. In order to ensure the long-term interest of the business, it should be able to fulfil its responsibility towards different interest groups which includes
- a. Workers
  - b. Consumers
  - c. Share holders
  - d. All the above [1]
6. Which of the following is a limitation of equity shares?
- a. Permanent burden of interest
  - b. Charge on assets
  - c. Danger of over-capitalisation
  - d. Repayment Obligation [1]

**OR**

The debentures, which do not carry any charge or security on the assets of the company are known as.....

- a. Naked debentures
  - b. Bearer debentures
  - c. Registered debentures
  - d. Unsecured debentures
7. While browsing through the website of Reserve Bank of India, Harsh came across the specimen of a financial instrument that was developed in Medieval India for use in trade and credit transactions. It was deemed to be an unconditional order in writing made by a person directing another to pay a certain sum of money to a person named in the order. Identify the financial instrument being described in the above lines.
- a. Draft
  - b. Hundi
  - c. Cheque
  - d. Chitti [1]



8. COLUMN A

COLUMN B

- |  |  |     |
|--|--|-----|
| i. Dormant partner   | a. Allows the use of his/her name                                |     |
| ii. Active partner   | b. Association with the firm is<br>unknown to the general public |     |
| iii. Nominal partner   | c. Participates in the management<br>of the firm                 |     |
| iv. Secret partner   | d. Does not participate in the<br>management of the firm.        |     |
| a. (i-a);(ii-b);(iii-c);(iv-d)   |  |     |
| b. (i-d);(ii-c);(iii-a);(iv-b)   |  |     |
| c. (i-c);(ii-d);(iii-a);(iv-b)   |  |     |
| d. (i-d);(ii-c);(iii-b);(iv-a)   |  | [1] |
| 9. The object clause of two companies can be same. (say True or False)                                     |  | [1] |
| 10. The Memorandum of Association must be signed by at least ..... persons in case<br>of a public company. |  | [1] |
| a. One   |  |     |
| b. Three   |  |     |
| c. Five  |  |     |
| d. Seven   |  |     |
| 11. Who appoints the top management of the company?  |  | [1] |
| a. Board of Directors  |  |     |
| b. Shareholders  |  |     |
| c. Partners  |  |     |
| d. None of the above   |  |     |
| 12. The shares of a government company are purchased in the name of  |  | [1] |
| a. Board of Directors  |  |     |
| b. Shareholders  |  |     |
| c. President of India  |  |     |
| d. None of the above   |  |     |
| 13. ....occurs when money is withdrawn from a bank account and the available<br>balance goes below zero.   |  | [1] |
| a. Bank overdraft  |  |     |
| b. Bank draft  |  |     |
| c. Crossed cheque  |  |     |
| d. None of the above   |  | [1] |

14. Equity shareholders are paid dividend only when the company earns sufficient profits.  
(say true or false) [1]
15. Intellectual property is divided into two broad categories: (i).....(ii)..... [1]  
(fill in the blanks with suitable words)

**OR**

Manufacturing Enterprises are defined in terms of investment in....., while Service Enterprises are defined in terms of their investment in.....  
(fill in the blanks)

16. 'Performance and credit rating' scheme is implanted by: [1]
- District Industries Centre
  - National Small Industries Corporation
  - National Bank for Agriculture and Rural Development
  - Small Industries Development Bank of India
17. Manish works as a marketing head in a company. He always encourages his subordinates to communicate through email and so that the management can have them on real time basis. Identify the aspect of e-business being highlighted in the above statement? [1]
- C2C Commerce
  - B2B Commerce
  - Intra B Commerce
  - B2C Commerce
18. Which of the following is not an advantage of Entrepreneurship Development? [1]
- Employment generation
  - Balanced economic development
  - Restricts Innovations
  - Social benefits
19. Which of the following is not the feature of Departmental Undertaking? [1]
- The employees of the enterprise are not civil servants
  - They are generally considered to be a major subdivision of the government department
  - Funding of these enterprises comes directly from the government treasury
  - All of the above
20. In case of a government company , minimum what percentage of the paid up capital is held by the government. [1]
- 51%
  - 49%
  - 52%
  - 30%

21. 'The start-up India scheme is a flagship initiative of the Government of India with an objective to carve a strong ecosystem for nurturing innovation and startups in the country'.

With reference to the above initiative enlist any three areas which the scheme aims at. [3]

22. What are GDRs? Mention clearly any four features of GDR. [3]

23. Before starting a business, Manav visited his grandfather to seek his blessings. His grandfather advised him to also define social goals for his business, besides striving towards the objective of profit maximisation. He also asked Manav to show concern towards employees, consumers, government and society. In order to win the whole-hearted cooperation and support to office employees, he must pay them fair wages and also provide good working conditions. Good quality products should be offered to the consumers at reasonable prices and he should also abstain from making any false claims in their advertisements.

What according to you are the other social objectives which Manav must assume with regard to the different interest groups that have not been pointed out by his

grandfather. [3]

**OR**

Procter and Gamble is a well known company dealing in different types of consumer goods. It specialises in a wide range of personal health/ consumer health, and personal care and hygiene products. These products are segregated into different categories as Health care, Family care, beauty & grooming products, fabric& home care etc.

The vision of the company is to promote sustainable living, in addition to goals such as, to use 100% renewable and recycled materials for all its products and packaging, decrease gas emissions by 30%, reduce energy use by 20% per unit production, and at the same time ensure that the plants are powered by 30% renewable energy.

Why do you think the company is so much concerned about undertaking concrete steps for pollution control? Explain by giving any six reasons in support of your answer.

24. How did the rise of intermediaries promote trade and commerce? [3]

**OR**

'In every society people undertake various activities to satisfy their needs.' State their types with vivid examples.

25. Spare Parts Ltd. is dealing with auto spare parts. As the business got expanded, some of the decisions got delayed, coordination decreased and the reputation was under question mark.

Mr. Rakesh, the new CEO felt that the company should have its own internet based communication system so that all employees can interact and pass on important information to each other through it. Even short meetings of different departments can be conducted through video conferencing to take fast action.

Which branch of e-business is Mr. Rakesh considering? Explain.

Enlist any three benefits of e-business. [4]

**OR**

Discuss the scope of e-business in detail.

26. Mention and explain any four features of business activities. [4]
27. Mehul sent an email to his friend Rahul who resides in US asking for financial help. Mehul shared with him that due to a prolonged illness, his business suffered a lot as a result, he was not able to repay the bank loan which he had taken for the expansion of his business. He also informed him that his warehouse has been confiscated by the bank authorities to settle his claims. Mehul also reminded Rahul of his good times in business when he had helped Rahul financially being the sole recipient of all the business profits.

In context of the above case:-

- a. Identify the related feature and liability of the form of business been described in the above paragraph
- b. Explain in brief, any two merits of this form of business which have not been mentioned in the paragraph. [4]

**OR**

Viju and Vinu belonged to a small town in Bihar and aspired to be famous movie star. As the luck shined on Viju, he became a superstar in Bhojpuri cinemas. Whereas, after working in a few films as a supporting actor, Vinu decided to start an advertising agency in Patna. In order to give a boost to his business right from its inception he asked his friend Viju to become a partner in his business. Viju agreed to do so and allowed the use of his name by the firm. But he refused to participate in the management of the business.

- a. Identify and explain the type of partners being mention in the given paragraph.
  - b. Also explain upon liability, capital contribution and shares in profit and loss with regard to the types of partners as identified in part (a) of the question.
28. This form of public enterprises are considered to be most suitable where national security is concerned. Identify and explain this form of business enterprise. What are the other three merits of this form of public sector enterprise? [4]
29. Mention two benefits derived by nations and two benefits derived by firms due to international business. [4]
30. A leading business house is operating a network of retail shops under the name "Your's Store". These shops are located in different parts of NCR, Delhi. They have identical layout and exhibit their products /provide the services in the same manner in all the outlets. The Head Quarter of the outlet is at Delhi. All the supplies to the stores are routed through the head quarters. The stores follow uniform policies laid down by the headquarters. Most of the goods are sold at uniform prices throughout the region.
- a. Identify & explain the type of retail store mentioned in the above case
  - b. Briefly explain any three features of such stores [4]
31. Explain the following -
- a. NSIC
  - b. DIC [4+2=6]

32. Sona, Mona, Roma, & Donna visited a nearby bank to open a bank account. Since they are all ignorant of the different types of bank accounts. So they request Relations Manager at the bank to help them understand different types of bank accounts.

Mona shared that she has received cash prize of Rs. 10,000 which she would like to place in an account which offers high rate of interest. She also mentioned that she does not need to withdraw this money before 5 years.

Roma said, she has started earning money through tuitions and would like to place her savings in an account.

Donna told the manager that she has got business registered with an e-commerce company and most of your business transactions will now be routed through the bank.

Sona expressed her desire to deposit Rs. 500 from her pocket money in an account every month for the next 2 years to buy a designer lehenga for her sister's wedding.

Identify and explain the different types of bank accounts been described in the above paragraph. [1.5x4=6]

**OR**

Explain in detail any six principles of Insurance.

33. "Good Health" is a popular health management company offering a wide range of healthcare products to the customers. Two years back the company started a series of online fitness classes and this segment of business has been a big hit right from its inception. It has helped the company to make huge profits. By taking into consideration, the requests from many of its regular clients, the company has now decided to start fitness centres at five strategic locations within the country. The management of the company has decided to use the portion of their undistributed earnings to finance the new business venture.

a. Identify and explain the source of finance the company intends to use for its expansion plans.

b. State any two merits and two limitations of the identified source of finance. [6]

34. Explain three advantages and three limitations of the Departmental Stores.

**OR**

Mention and explain any three services of retailers to -

a. Manufacturers/Wholesalers

b. Consumers

\*\*\*\*\*



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:- XI**  
**Time:- 3 Hrs.**

**Subject:- Economics**  
**F. M:- 80**

**General instruction:-**

- I) *All questions in both the sections are compulsory.*  
II) *Question no. 1-10 and 18-27 are very short answer questions carrying 1 mark each. They are required to be answered in one sentence each.*  
III) *Question no. 11-12 and 28-29 are short answer questions carrying 3 marks each. Answers to them should normally not exceed 60 words each.*  
IV) *Question no. 13-15 and 30-32 are also short answer questions carrying 4 marks each. Answers to them should normally not exceed 70 words each.*  
V) *Question no.16-17 and 33-34 are long answer questions carrying 6 marks each. Answers to them should normally not exceed 100 words each.*  
VI) *Answers should be brief and to the point and the above word limits should be adhered to as far as possible.*

**Section -A**

- 1) If the consumption of an additional of a commodity causes no change in total utility, then the resultant MU is ; [1]  
a) Zero  
b) Positive  
c) Negative  
d) constant
- 2)  $MU_x$  is 40 and  $MU_y$  is 30. If the price of Y is Rs. 9, then price of X at equilibrium will be \_\_\_\_\_. [1]  
a) 9  
b) 30  
c) 15  
d) 12

**OR**

Slope of Indifference Curve is measured by:

- a) MRS  
b) MRT  
c) MOC  
d) None of these
- 3) If the fall in the price of one good raises the demand for another good, two goods are called \_\_\_\_\_. [1]
- 4) Market demand curve is obtained by \_\_\_\_\_ summation of individual Demand curves. [1]  
a) Vertical  
b) Horizontal  
c) Both (a) and (b)  
d) Neither (a) nor (b)

- 5) Which of the following will have elastic demand? [1]
- a) Matchbox
  - b) NCERT books
  - c) Medicines
  - d) Air conditioners
- 6) Increases in total product always indicates that there is increasing returns to a factor. (True/False). [1]
- 7) Cost function is a \_\_\_\_\_ concept: [1]
- a) Economical
  - b) Functional
  - c) Financial
  - d) technical
- 8) when marginal revenue is constant and not equal to zero, then total revenue will also be constant. (True/False). [1]
- 9) Which of the following is not a essential element of supply? [1]
- a) Price of the commodity
  - b) Period of time
  - c) Willingness to buy
  - d) Quantity of the commodity
- 10) In which market form, marginal revenue is equal to price? [1]
- a) Monopoly
  - b) Oligopoly
  - c) Perfect competition
  - d) Monopolistic competition
- 11) What is meant by change in quantity supply and change in supply? [3]

**OR**

When the price of a commodity falls from RS. 10 per unit to Rs. 9 per unit, total revenue from it falls from Rs.1200 to Rs. 918. Calculate price elasticity of supply.

- 12) A new steel plant comes up in Jharkhand. Many people who are previously unemployed in the area are now employed. How will this affect demand curve for black and white T.V and Colour T.V? ( use diagram). [3]
- 13) Explain the following conditions: [4]
- a) Movement along the same indifference curve.
  - b) Shift from a lower to a higher indifference curve.
- 14) The price elasticity of demand for good X is half the price elasticity of good Y. A 25% rise in price of good Y reduces demand from 400 units to 300 units. Calculate the percentage rise in demand of good X when its price falls from Rs. 10 to Rs. 8 per unit. [4]

**OR**

Why there is an inverse relation between the price of a commodity and its quantity demanded?

Explain through utility analysis.

15) It is expected that replacement of all existing taxes on good X by the proposed single goods and service tax (GST) will bring down overall tax on good X substantially. Explain its likely chain of effects on price and quantity of good X. use diagram. [4]

16) Explain the law of variable proportions with the help of total and marginal product curves. Also mention the causes of different returns to a factor. [6]

17) Answer the following: [6]

A) Why does the vertical distance between AC curve and AVC curve gradually decline?

B) Complete the following table:

output	MC	AVC	AC
1	20	----	----
2	----	19	----
3	16	18	----
4	18	----	----
5	----	----	31

If AFC at 5<sup>th</sup> unit is 12.

**OR**

Define Explicit and Implicit cost. Find out (a) explicit and (b) implicit cost of the following:

Particulars	Rs. In thousand
Investment in fixed assets	2000
Borrowing at 12% interest per annum	1500
Wages paid during the year	120
Annual rental value of owner's building	100
Annual depreciation	100
Estimated annual value of owner's management services	240



**PART -B**

- 18) Statistics as a singular sense means: [1]
- a) Statistical data
  - b) Statistical methods
  - c) Inductive statistics
  - d) Descriptive statistics
- 19) The data collected on the height of a group of students after recording their heights with a measuring tape are: [1]
- a) Primary data
  - b) Secondary data
  - c) Discrete data
  - d) Continuous data
- 20) Nationality of a student is: [1]
- a) An attribute
  - b) A discrete variable
  - c) A continuous variable
  - d) Either (a) or (c)

**OR**

For the mid values given : 25, 34, 43, 53, 61, 70, the first class of the distribution is:

- a) 25-34
  - b) 24.5-34.5
  - c) 20-30
  - d) 20.5-29.5
- 21) Which bar diagram is used to represent net changes in data? [1]
- 22) The mean of 12 numbers is 24. If 5 added in every number, the new mean is: [1]
- a) 25
  - b) 84
  - c) 29
  - d) None of these
- 23) Median is greatly influenced by extreme values? (True/False). [1]
- 24) Standard deviation is independent of change of origin and scale. (True/False). [1]
- 25) The standard deviation of a set of 50 observations is 6.5. if the value of each observation is increased by 5, then the standard deviation is: [1]
- a) 2.5
  - b) 6.5
  - c) 3.5
  - d) None of these

26) The correlation between sale of cold drinks and day temperature is: [1]

- a) Positive
- b) Negative
- c) Zero
- d) None of these

27) Write the formula for 'Fisher's ' index number'. [1]

28) Convert the following 'more than' cumulative frequency distribution into 'less than' cumulative frequency distribution [3]

CI(more than)	10	20	30	40	50	60	70	80
frequency	124	119	107	84	55	31	12	2

**OR**

Out of a total number of 5000 people who applied for DDA flat, 2950 were males. Out of total applicants, 3500 were service class and others, business class. The number of male applicants who belong to business class were 725. Tabulate the given information.

29) The average age of a class having 35 students is 14 years. When the age of the class teacher is added to the sum of the ages of the students, the average rises by 0.5 year. What must be the age of the teacher? [3]

30) Prepare Histogram for the following data: [4]

marks	0-10	10-20	20-30	30-60	60-80	80-90	90-100
No. of students	5	10	4	18	4	3	9

31) The following series relates to the daily income of workers employed in a farm. Compute (a) highest income of lowest 50% workers; (b) minimum income earned by top 25% workers . [4]

Daily income	10-14	15-19	20-24	25-29	30-34	35-39
No. of workers	5	10	15	20	10	5

**OR**

Find the missing frequency from the following distribution, if median is 35 and N=170.

variables	0-10	10-20	20-30	30-40	40-50	50-60	60-70
frequency	10	20	?	40	?	25	15

32) Briefly discuss the problems involved in the construction of Index numbers. [4]

33) Calculate the coefficient of correlation of the given data by assume mean method: [6]

X series	12	15	18	21	24	27	30
Y series	6	8	10	12	14	16	18

34) Mean and standard deviation of two distributions of 100 and 150 items are 50, 5 and 40, 6 respectively.  
Find the standard deviation of all the 250 items together. [6]

**OR**

Calculate the coefficient of variation of the following data:

Age group	0-10	10-20	20-30	30-40	40-50	50-60	60-70
No. of person	5	15	20	25	18	10	7

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# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2020-2021)

Class:- XI  
Time:- 3 Hrs.

Subject:- History  
F.M. :- 80

## General Instruction:-

1. Answer all the questions. Some questions have internal choice. Marks are indicated against each question. This question paper comprises of six sections.
2. Section A: question numbers 1 to 16 are objective type questions carrying one mark and should be answered in a word or one sentence each
3. Section B: question numbers 17 to 19 are case based / source based having multiple choice questions. Each question has four sub-parts. Attempt any three sub-parts from each question.
4. Section C: answer to questions carrying three marks, question number 20-23, should not exceed 100 words each.
5. Section D: answer to questions carrying eight mark, question 24 to question 26, should not exceed 350.
6. Section E: question numbers 27 to 29 are source based questions carrying five marks each.
7. Section F : For Question number 30 identify the places and Give answer in the answer script itself. No need to attach a map in the answer script as it's an online exam.

## SECTION - A

[1x16=16]

1. Which country had trade with Japan before 1853?
2. Define reformation.
3. What is *Mazhab*?
4. Read the following information And mention the context in which the statement is connected:  
"Ultimately, the messenger 'grew vary of mouth ': He got all the messages mixed up."
5. Match the following

A. 622AD	1. Mohammad declared himself as the prophat of God
B. 612AD	2. End of Ummayyad dynasty
C. 1095AD	3. Beginning of Hijrcalender
D. 750 AD	4. First Crusade

Codes

	A	B	C	D
a.	3	1	4	2
b.	1	2	3	4
c.	3	1	2	4
d.	2	1	4	3

6. Correct the sentence and rewrite.

'The Manchu dynasty was over thrown and a communist government was established by Mao Zedong'.

7. What are the two phonetic alphabets developed by the Japanese?

8. which among the following subjects was not of interest to Michaelangelo?

- a. Anatomy
- b. Painting
- c. Music
- d. Mathematics

9. Whose invention was the **Powerloom**?

10. In which of the following places the Great exhibition of 1851 was held?

- a. Birmingham
- b. Manchester
- c. London
- d. Paris

11. Which among the following Roman emperors accepted Christianity as the state religion of the Roman Empire?

- a. Trajan
- b. Constantine
- c. Tiberius
- d. Augustus

12. Which among the following is written by Oodgeroo?

- a. Two nations
- b. Two states of colour
- c. Two dreamtimes
- d. Two windows to light

13. What does the 'Gold Rush' meant?

14. Read the following statement about Industrial revolution carefully.

- 1. It started in England
- 2. The period is mentioned so because England was 'swept by a wave of gadgets.
- 3. It was Arnold Toynbee who used the term for the first time in English

Which of the above statements is/are correct?

- a. 1, 2 & 3
- b. 2 & 3
- c. Only 1
- d. 1&2

15. Assertion(A ): The christianisation of the Roman Empire in the fourth and fifth centuries was a gradual and complex process.

Reason (R ) :The traditional religious culture of the classical world had been polytheist.  
Codes.

- 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.

16. Identify the following image and write its name.



### SECTION - B

17. Study the following picture of a woman of the winnebago tribe of Winconsin and carefully and answer any three of the following questions.



i. Choose the correct option.

Assertion (A) : The tribes of the North America did not develop kingdoms and empires

Reason (R) : They were ignorant people

- a. Both A and R are true and R is the correct explanation of A. [1]
- b. Both A and R are true, but are is not the correct explanation of A.
- c. A is true, but R is true
- d. A is false , but R is true

ii. A hair cut ( Mohawk) was given a name of an American tribe because. [1]

- a. The Mohawks used to cut their hair like that
- b. The Mohawks asked Europeans to cut their hair like that
- c. Names of American tribes are often given to things unconnected with them
- d. Both a and b.

iii. Who were known as the indigenous people? [1]

- a. People belonging to naturally to a place
- b. The native Americans
- c. The native Australians
- d. All of the above

iv. Where does she belonged to [1]

- a. Australia.
- b. North America
- c. South America
- d. Europe

18. Read the following extract from the novel ' Hard times', by Charles Dickens carefully and answer any three of the following questions by choosing the correct option.

'It was a town of Red brick or of brick that would have been red if the smoke and Ashes had allowed it: but as matters stood it was a town of unnatural red and black like the painted face of a Savage. It was a town of machinery and tall chimneys, out of which interminable serpents of smoke trailed themselves forever and ever, and never got uncoiled. It had a black canal in it, and a river that ran purple with ill smelling die, and vast piles of building full of windows where there was a rattling and a trembling all day long, and where the piston of the steam engine worked monotonously up and down, like the head of an elephant in a stare of melancholy madness.'

i. Charles Dickens was known as [1]

- a. A great writer about the words of men
- b. Most severe contemporary critic of the horrors of the industrial revolution
- c. An industrialist's writer
- d. None of the above

ii. When did industrialization happen in the country where Charles Dickens was a native of?

- a. 1812-70
- b. 1780-1850
- c. 1728-1774
- d. 1850-1927

[1]

- iii. According to the extract which factor of the town was most affected by the industrial revolution
- a. Social
  - b. Atmospheric
  - c. Environmental
  - d. Economic
- [1]

- iv. Assertion: Until late in the nineteenth century, municipal authorities were negligent in attending to the sanitation and hygienic needs of the slums in industrial towns  
Reason: Deaths were caused by epidemics of disease which spread from unhygienic conditions
- a. Both A and R are true and R is the correct explanation of A.
  - b. Both A and R are true, but are is not the correct explanation of A.
  - c. A is true, but R is true
  - d. A is false, but R is true
- [1]

19. Read this writing of Abbot Sugar about the Abbey of St. Denis, near Paris carefully and answer any three of the following questions.

‘ Because of the inadequacy which we often felt on feast days, for the narrowness of the place forced the women to run towards the altar upon the heads of the men with much anguish and noisy confusion, (we decided) to enlarge and amplify the noble church...  
We also caused to be painted, by the exquisite hands of many Masters from different regions, a splendid variety of new Windows... Because these windows are very valuable on account of their wonderful execution and the profuse expenditure of painted glass and sapphire glass, we appointed an official master craftsman for their protection, and also a Goldsmith... Who would receive their allowances, namely, coins from the altar and flour from the common storehouse of the brethen, and who would never neglect their duty, to look after these( works of art)’.

- i. Choose the correct option. [1]
- Assertion (A ):One of the ways that rich merchants spent their money was by making donations to churches were built in France.  
Reason (R ):Big churches were designed so that the priest’s voice could be heard clearly within the hall.  
Codes
- a. Both A and R are true and R is the correct explanation of A.
  - b. Both A and R are true, but are is not the correct explanation of A.
  - c. A is true, but R is false
  - d. A is false , but R is true
- ii. Why the big churches were built? [1]
- a. It will halt the process of conversion
  - b. Increase of population
  - c. They were beautifully designed
  - d. They were deeply devoted to religion



- iii. What was this big churches known as [1]  
a. Dome  
b. Abe  
c. Cathedral  
d. Block
- iv. What is Abby [1]  
a. An organisation of monks  
b. A religious community  
c. Monastery  
d. All of the above

**SECTION - C** [3x4=12]

20. Explain *san min chui*.  
21. Explain the role of the Arab scholars in retrieval of classical culture during the renaissance.  
22. Discuss the meaning of Sama.  
23. Why the knights had important role in feudalistic Europe ?

**SECTION - D** [8x3=24]

24. Describe the development of art and architecture of humanistic Europe with sufficient examples.  
25. What were the effects of industrial revolution?  
26. How did Japan became a model in the modernization of its economy?

**SECTION- E**

27. Read the following passage carefully an answer the questions that follow.

‘For natives the goods exchanged with the Europeans were gifts given in friendship. But for Europeans the goods like the fish and furs, they exchanged, where commodities that could be sold in Europe at huge profits. The prices of goods they sold varied from year to year depending on demand and supply. The natives were unable to understand this as they had no knowledge of the market and far away Europe. In fact, they were puzzled to see that the European sometimes gave them a lot of things in exchange of their goods and sometimes very little. The greed of Europeans often made them very sad. The fur of North America was in great demand, particularly in Western Europe. The natives had slaughtered hundreds of rivers in order to meet this demand of European traders. They were often very sad fearing that the animals would definitely take revenge on them for this destruction.’

- a) Why were the gifts like the fish and furs, given in friendship by the natives, commodities for the Europeans? [3]  
b) Why were the natives unable to understand that the Europeans sometimes gave them a lot of things in exchange of their goods and sometimes very less? [2]

28. Read the following passage carefully and answer the questions that follow.

A man of the southern marshes, Nabopolassar, released Babylonia from Assyrian domination and 625 BCE. His successes increased that territory and organised building projects at Babylon. From that time, even after the achaemaenidsof Iran conquered Babylon in 539 BCE and under 331 BCE when Alexander conquered Babylon, Babylon was the Premier city of the world

Nabonidus was the last ruler of independent Babylon. He writes that the God of Ur came to him in a dream and ordered him to appoint a priestess to take charge of the Cult in that ancient town in deep South. He writes "because for a very long time the office of High Priestess had been forgotten, her characteristic features nowhere indicated I bethought myself day after day..." Then, he says, he found the stele of a very early King whom we today date about 1150 BCE and saw on the stele the carved image of the priestess. He observed the clothing and jewellery that was depicted. This is how he was able to dress his daughter for her consecration as Priestess.

On another occasion, Nabonidus men brought to him a broken statue inscribed with the name of Sargon, King of Akkad. (we know today that the latter ruled around 2370 BCE) Nabonidus, and indeed many intellectuals, heard of this great King of remote times. Nabonidus felt he had to repair the statue. 'Because of my reverence for the Gods and respect for kingship', he writes, I summoned skilled craftsmen, and replaced the head.

1. When and by whom Babylonia was released from Assyrian domination [1]
2. Who was Nabonidus? [2]
3. Why do you think that Nabonidus had cherished early Mesopotamian traditions? [2]

29. Read the following passage carefully and answer the questions that follow.

"The regime established by Augustus, the first emperor, in 27 BCE, was called the 'Principate'. Although Augustus was the sole ruler and only real source of authority, the fiction was kept alive that he was actually 'the leading citizen'

(princes in Latin), not the absolute ruler. This was done out of respect for the Senate. The Senate had existed in Rome for centuries and it had been remained a body representing the aristocracy, that is, the wealthiest families of Rome and later, Italian descent mainly landowners. The emperors were judged by how they behaved towards the Senate. The worst emperors were those who were hostile to the senatorial class, behaving with suspicion or brutality and violence".

1. What do you mean by 'Principate'? [2]
2. How were the Roman emperors judged by? [1]
3. What do you understand by the Senate? [2]

### SECTION - F

30. Identify the following places by their earlier names and write their present names [4×1=4]

- a. Gaul
- b. Mesopotamia
- c. Qahiro
- d. Edo

\*\*\*\*\*



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP RANCHI**  
**ANNUAL EXAMINATION CLASS XI 2020-21**

**Class : XI**  
**Max. Marks: 80**

**Sub: Political Science**  
**Time : 3hrs.**

**General Instructions:-**

- a) All questions are compulsory.
- b) Section a has 16 objective type questions of one mark each.
- c) Section B has 2 passage based question 17 and 18 having multiple choice questions of one mark each
- d) Section C Question number 19-22 carries 2 marks each answer to this question should not exceed 40 words each
- e) Section D Question number 23-27 carries 4 marks each. Answer to this question should not exceed 100 words each
- f) Section E Question number 28-29 pertain to map and cartoon questions carrying 5 marks each to be answered accordingly.
- g) Section F Question number 30-32 carry 6 marks each. Answers to these questions should not exceed 150 words each.

**SECTION - A**

1. The bill that enjoys the sitting of both the Houses due to deadlock is
  - (a) Prevention of Terrorism Bill
  - (b) Revenue Generation Bill
  - (c) Entertainment Tax Bill on Gujarat State
  - (d) Customs Tariff (Amendment) Bill
2. Which of the following provisions of the Indian constitution was passed without any virtual debate?
  - a) Introduction of universal adult franchise
  - b) Fundamental rights
  - c) Directive principles of state policy
  - d) Parliamentary democracy
3. The idea of preamble is borrowed from-
  - a) Canada's constitution
  - b) UK's constitution
  - c) USA's constitution
  - d) French constitution

4. The electoral system first past the post system is also known as...
  - a) Proportional representative system
  - b) Direct election
  - c) Separate electorate
  - d) Plurality system
5. The electoral procedure of the vice president of India is mentioned under article
  - a) 56
  - b) 60
  - c) 61
  - d) 66
6. As of 2019 how many total constitutional amendments have been in India?
  - a) 104
  - b) 105
  - c) 102
  - d) 103
7. In Golaknath vs the State of Punjab case, the Supreme Court was led by Chief Justice
  - (a) Suba Rao
  - (b) R. S. Pathak
  - (c) J. S. Verma
  - (d) R. C. Lahoti
8. The Judges of the Supreme Court of India retire at the age of:
  - (a) 62 years
  - (b) 65 years
  - (c) 60 years
  - (d) 50 years
9. In 1989, P.K. Thungon Committee recommended the constitutional recognition of
  - (a) Local government bodies
  - (b) Consumer courts
  - (c) Planning commission
  - (d) Financial commission for states
10. The first State in the country to adopt the Panchayati Raj System on 2nd October 1959 was
  - (a) Andhra Pradesh
  - (b) Rajasthan
  - (c) Bihar
  - (d) Orissa

11. Which one of the following articles authorises the Parliament to protect persons in the service of the union or a state in respect of any action taken by them during martial law to maintain or restore order?
- (a) Article 167 and 168
  - (b) Article 24 and 25
  - (c) Article 33 and 34
  - (d) Article 155
12. According to the Constitution, India is a
- (a) Federal state
  - (b) Unitary state
  - (c) Union of states
  - (d) Quasi-federal state
13. UNDP means:
- (a) United Nations Development Programme
  - (b) United Nations Development Planning
  - (c) United Nations Destruction Programme
  - (d) None of the above
14. The free market is a product of
- (a) Socialism
  - (b) Feminism
  - (c) Neo-liberalism
  - (d) Patriarchy
15. The famous quote "In a country well governed, poverty is something to be ashamed of. In a country badly governed, wealth is something to be ashamed of." is given by
- (a) J.S.Mill
  - (b) Plato
  - (c) Aristotle
  - (d) Confucius
16. A man by nature is a social and political animal is the cornerstone of the philosophy of:
- (a) Plato
  - (b) Socrates
  - (c) Aristotle
  - (d) Montesquieu

### **SECTION - B**

17. Study the passage given below carefully and answer the questions that follow:

"A right is an essentially an entitlement or justified claim. It denotes what we are entitled to as citizens, as individuals, as human beings.

It is something we consider to be due to us: something that the rest of the society must recognize as being a legitimate claim that must be upheld.”

- I) To treat people with dignity was to treat them morally... whose view was this..
    - a) J.J Rousseau
    - b) Immanuel Kant
    - c) Thomas Hobbes
    - d) J.Smith
  - II) When was Universal Declaration of Human Rights proclaimed and adopted by UN
    - a) 10<sup>th</sup> December 1947
    - b) 10<sup>th</sup> December 1948
    - c) 10<sup>th</sup> December 1958
    - d) 10<sup>th</sup> December 1968
  - III) When was the theory propagated that Rights are given to us by Nature or God.
    - a) 17<sup>th</sup> century
    - b) 19<sup>th</sup> century
    - c) 20<sup>th</sup> century
    - d) 16<sup>th</sup> century
  - IV) What is the force behind Legal Rights?
    - (a) Force of public opinion
    - (b) Force of morality
    - (c) Force of law
    - (d) Force of nature
18. Under the 73rd and 74th amendment, 1/3 seats are reserved for women in the local bodies which is an example of women empowerment. Many times efforts are made for women reservation in Parliament and state legislature. But giving only reservation is not enough. Efforts should be made in social and economic spheres so that women get employment also.
- I) According to 73rd Amendment, the tenure of Panchayats in all states is:
    - (a) Six years
    - (b) Three years
    - (c) Five years
    - (d) Four years
  - II) Which of the following is not an institution of Rural Local Government?
    - (a) Panchayat
    - (b) Zila Parishad
    - (c) Municipal Corporation
    - (d) Gram Sabha

- III) Which of the following statements is not correct?
- a) Panchayati Raj was established in India by Jawaharlal Nehru
  - b) Madhya Pradesh was the first state which implemented The Panchayati Raj system in India
  - (c) 73rd Constitutional amendment was implemented in 1992
  - (d) Tamil Nadu has adopted the bicameral method
- IV) Which of the following Article is related to Panchayati Raj?
- (a) Article 243
  - (b) Article 324
  - (c) Article 124
  - (d) Article 73

### SECTION - C

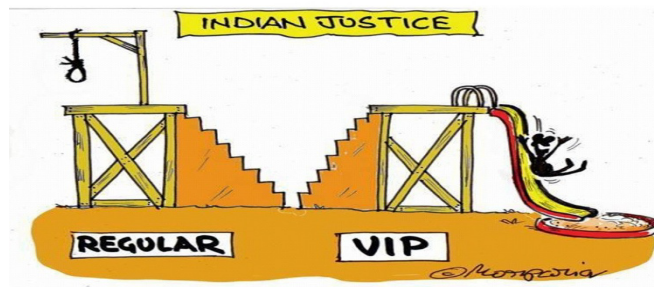
- 19. What is the difference between Liberty and Freedom
- 20. What do you understand by the term Human Rights?
- 21. Describe the procedure of election of President of India.
- 22. What are some new claims for rights which the process of development has generated?

### SECTION - D

- 23. What are different dimensions of Justice?
- 24. What are the objectives of Indian Constitution?
- 25. When children are forced to work as child labours and therefore they eventually become dropouts which fundamental rights gets violated and why?
- 26. Discuss the provisions for amending the constitution.
- 27. Write a note on Permanent Executive: Bureaucracy.

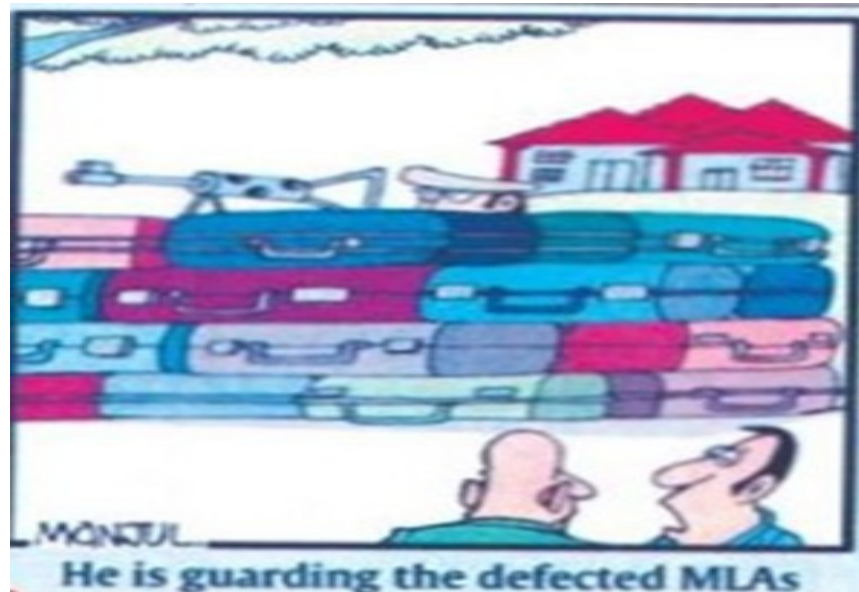
### SECTION - E

28. Read the following cartoon and answer the following questions:



- 1) What is the problem of the Indian judiciary that this cartoon is trying to indicate towards? (1)
- 2) Do you agree with this kind of representation of the Indian judicial system? Give reasons for your view. (2)
- 3) Can as law abiding citizens we really should question or have some reservation against the judgements of the courts, answer with respect to the decisions of the Supreme Court in particular? (2)

29.



- 1) Which problem of the Indian political system is represented in the above cartoon? (1)
- 2) Elaborate upon need and outcome of the 52nd amendment act to the Indian constitution, and also mention the respective year of the amendment. (2)
- 3) -Which amendment act to the Indian constitution modified the 52nd amendment? (2)

#### SECTION - F

30. What are the powers and functions of the parliament?
31. Write a short note on the relevance of PIL in ensuring maximum participation in a democracy.
32. Elaborate the different dimensions of development.

**OR**

Elaborate on the three basic grounds of criticisms of the development models.

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**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:- XI**  
**Time:- 3 Hrs.**

**Subject:- Sociology**  
**F. M:- 80**

**General Instructions: -**

1. The question paper is divided into four sections.
2. There are 35 questions in all. All questions are compulsory.
3. Section A includes question No. 1-16 . These are objective type questions.
4. Section B includes question No. 17-25. These are very short type questions carrying 2 marks each. Answer to each question should not exceed 30 words.
5. Section C includes question No. 26 to 32. These are short answer type questions Carrying 4 marks each .Answer to each question should not exceed 80 words . Question 26 and 27 are case based questions with 4 parts each carrying 1 mark , making the question of 4 marks each.
6. Section D includes question No. 33 -35. They are long answer type questions carrying 6 marks each. Answer to each question should not exceed 200 words each. Question No. 35 is to be answered with the help of the passage.

**SECTION - A**

1. The Enlightenment ,an European intellectual movement of the late 17<sup>th</sup> and 18<sup>th</sup> centuries emphasized –
  - A. Faith and Belief
  - B. Evolution and Technology
  - C. Reason and Individuality
  - D. Religion and Faith
2. The basis of common sense knowledge is---
  - A. Rational thinking
  - B. General understanding
  - C. Objective
  - D. A body of facts
3. -----a mode of reward or punishment that reinforce socially expected forms of behavior.
  - A. Identity
  - B. Conflict
  - C. Sanctions
  - D. Law

4. The behavior, obligations and privileges attached to a social status is known as—
  - A. Status set
  - B. Social set
  - C. Role set
  - D. Status symbol
5. Max Weber looks at religion in its relationship to other aspects of social and economic behavior . Max argues that a branch of Protestant Christianity exerted an important influence on the emergence and growth of-----  
 CHOOSE THE INCORRECT OPTION.
  - A. Capitalism
  - B. Calvinism
  - C. Concept of Post- destination
  - D. No savings
6. STATE WHETHER TRUE OR FALSE.  
 A State exists where there is a political apparatus of Government plus Civil service official ruling over a given territory.
7. Social change is such a general term that it can be , and often is, `used to refer to almost any kind of change. It is classified into these categories—  
 CHOOSES THE INCORRECT OPTION
  - A. Extensive and Intensive
  - B. Revolutionary and Evolutionary
  - C. Internal and External
  - D. Powerful and Weak
8. It refers to the conversion of a previously lower class neighbourhood into a middle and upper class one—
  - A. Gated communities
  - B. Gentrification
  - C. Ghettoisation
  - D. None of these
9. A process in Capitalist society by which human beings are separated and distanced from nature, other human beings, their work and its product, and their own nature or self—
  - A. Enlighted
  - B. Stranger
  - C. Alienation
  - D. Divine

10. In studying social action, sociologist's task was to recover the meanings attributed by the actor. To accomplish this task, the sociologist had to put themselves in the actor's place. Which is treated as -
- Sympathetic understanding
  - Empathetic understanding
  - Value subjectivity
  - Values and feeling
11. For him Society was a social fact which existed as a moral community over and above the individual. Thus, the existence of otherwise 'invisible' things like ideas, norms, values could be empirically verified by studying the patterns of social behavior of people.
- Emile Durkheim
  - Max Weber
  - Karl Marx
  - None of these
12. It typically involves a collection of different self-sufficient groups where each person within a particular is engaged in similar activities or functions.
- Organic society
  - Mechanical society
  - Heterogenic society
  - None of these
13. The branch of Anthropology that studied human racial types by measuring the human body, particularly the volume of the cranium (skull), the circumference of the head and the length of the nose.
- Orthopedic
  - Anthropometry
  - Orthopometry
  - Orthologist
14. FILL- IN THE BLANK.  
According to -----this is living tradition which maintains link with the past by retaining something from it, and at the same time incorporates new things.
15. STATE TRUE OR FALSE.  
Louis Dumont thought that social institutions like caste were less important than villages.
16. D.P. Mukherji believed that there were three 'Principles of change' recognised in Indian traditions, namely Shruti, Smriti and Anubhav. Of these-----is the revolutionary principle.
- Shruti
  - Smriti
  - Anubhav
  - All of these

## SECTION -B

17. What is Pluralistic society?

**OR**

What do you know about Synthetic school of Sociology?

18. How is social control taking place as per Functional Perspective ?

19. "One of the main features of modern societies is an enormous expansion of economic interdependence". What do you mean by transformation or specialization of work?

20. What is Cultural-Lag?

**OR**

Define Folkways.

21. What is cultural change.

22. Define Ghettoisation.

23. Describe 'Emergent Level'.

24. Explain 'Mode of Production'.

25. Define Exogamy.

## SECTION-C

26. Read the given passage and answer the questions that follow the passage.

Change of other sorts is also slow to come because villages are scattered and not as well connected to the rest of the world as cities and towns are. Of course, new mode of communication, particularly the telephone and television have changed this. So the cultural 'lag' between the village and towns is now much shorter or non-existent. Communication links of other sorts (road, rail) have also generally improved over time so that few villages can really claim to be "isolated" or "remote" , words often unthinkingly attached to villages in the past. This has also accelerated the pace of change somewhat. For obvious reasons changes associated with agriculture or with agrarian social relations have a very major impact on rural society.

1. In India the first phase of Land Reforms after independence took away proprietary rights from----- and gave them to the groups that were actually managing the land.

- A. Dominant caste
- B. Absentee Landlords
- C. Landless
- D. None of these

2. In many regional contexts, the dominant castes became very powerful in economic terms and dominated the countryside. Who has named this group as Dominant Castes?
  - A. D P Mukherji
  - B. M N Srinivas
  - C. G S Ghurye
  - D. A R Desai
3. A variety of factors ensure that the subordinate sections of society have much less scope for expressing themselves in rural areas than their counterparts in cities. Lack of ----- makes it difficult for people to dissent.
  - A. Anonymity and distance
  - B. Technological changes
  - C. Awareness
  - D. Connectivity
4. Sudden fluctuations in agricultural prices, drought or floods can cause havoc in rural society. The recent spate of-----in India is an example of these.
  - A. Farmer growth
  - B. Trader's suicide
  - C. Farmer suicide
  - D. All of these

27. Read the given passage and answer the questions that follow the passage.

For Marx, the most important method of classifying people into social groups was with reference to the production process , rather than religion, language, nationality or similar identities. He argued that people who occupy same position in the social production- process will eventually form a class. By virtue of their location in the production process and in property

Relations, they share the same interests and objectives, even though they may not recognise this immediately. Classes are formed through historical processes, which are in turn shaped by transformation in the conditions and forces of production, and consequent conflicts between already existing classes, as the mode of production- changes. Conflicts develop between different classes which result in struggles.

1. Marx was a proponent of class struggle. In the -----he and Engels presented their views in a clear and concise manner.
  - A. Critique of Political Economy
  - B. 18<sup>th</sup> Brumaire of Louis Bonaparte
  - C. The Communist Manifesto
  - D. Division of Labour
2. Even when two classes are objectively opposed to each other, it is only after this kind of class consciousness developed through mobilization which is
  - A. Economic
  - B. Political
  - C. Social
  - D. Cultural
3. In Capitalism -----or capitalist owns all the means of production.
  - A. Bourgeoisie
  - B. Journeymen
  - C. Plebian
  - D. None of these
4. The mode of production as being something like a building in the sense that it consists of a foundation or base primarily-----
  - A. Political
  - B. Social
  - C. Cultural
  - D. Economic

28. What is special or different about the kind of objectivity needed in Sociology? Discuss.

**OR**

How was the Industrial Revolution responsible for giving rise to Sociology?

29. What were the specifics of Indian culture and society, and how do they affect the pattern of change?
30. Who is called as the 'Father of Sociology'? How is Sociology related to Economics?
31. The two concepts Status and Role are often seen as twin concepts. Explain.

32. Explain religion as a social institution.

**OR**

Describe variations in Family Forms .

**SECTION---D**

33. What are some kinds of social changes brought by Environment?

**OR**

What is meant by Social Order and how it is maintained ?

34. What is Welfare-State? Why is A R Desai critical of the claims made on its behalf?

35. Read the given passage, and answer the following questions.

We boys used the streets for many different things – as a place to stand around watching, to run around and play, try out the manoeuvrability of our bikes. Not so good for girls. As we noticed all the time, for girls the street was simply a means to get straight home from school. And even for this limited use of the street they always went in clusters, perhaps behind their purposeful demeanour they carried the worst fear of being assaulted.

1. What is Gender? Do you see stereotyping as the violation of Right to Equality? (3)

2. How far Mass-media is helpful to bring changes in conventional outlook of society? (3)

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# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2020-21)

Class:-XI

Time- 3 Hrs.

Subject:- Entrepreneurship

M.M.-70

**General Instruction: -**

1. There is no overall choice, though internal choice is given.
2. Read the question carefully before attempting.

- 
1. Which of the following is a recognizable sign, design or expression that distinguishes products or services of a particular trader from the similar products or services of other traders? [1]  
(a) Copyright (b) Patents (c) Trademark (d) None of these
  2. Finance is required at the time of \_\_\_\_\_ [1]  
(a) Starting of the business (b) Running of the business  
(c) Expansion of the business (d) All the above
  3. The cost incurred by a company to produce, store and sell one unit of a particular product is referred to as \_\_\_\_\_ (Fill in the blank) [1]

**OR**

The business is at neither \_\_\_\_\_ nor \_\_\_\_\_, when it is at BEP. (Fill in the blank)

4. The Entrepreneurs who undertake Agricultural as well as allied activities in the field of agriculture are known as \_\_\_\_\_ [1]  
(a) Non-Technical entrepreneurs (b) Corporate entrepreneurs  
(c) Agricultural Entrepreneur (d) Trading Entrepreneur
5. \_\_\_\_\_ include desire for self respect, reputation, prestige, recognition etc. as per Maslow's hierarchy of needs theory. [1]  
(a) Safety Needs (b) Social Needs (c) Esteem Needs (d) None of these

**OR**

\_\_\_\_\_ are very shy, lazy and cautious and generally second generation entrepreneurs.

- (a) Innovative Entrepreneurs (b) Imitative Entrepreneurs  
(c) Fabian Entrepreneurs (d) None of these
6. The measure of unit in which products are sold is termed as \_\_\_\_\_ [1]  
(a) Unit of sale (b) Unit Price (c) Unit Cost (d) None of these



7. Top level Managers include \_\_\_\_\_ [1]  
(a) CEO (b) Production Manager  
(c) First Line Managers (d) None of these

**OR**

An entrepreneur can borrow capital from outside sources in the form of \_\_\_\_\_

- (a) Preference Capital (b) Debentures (c) Margin Money (d) None of these  
8. \_\_\_\_\_ is an unstructured discussion but very productive, as one idea may lead to another in such situation. [1]  
(a) Brain storming (b) Creativity (c) Market research (d) None of these

**OR**

\_\_\_\_\_ study details on how to deliver a product or service i.e., materials, labour, transportation, technology required etc.

- (a) Market Feasibility (b) Technical Feasibility  
(c) Organisational Feasibility (d) None of these  
9. An Investor or lending institution require the submission of which of the following before considering the request for capital. [1]  
(a) Business Plan (b) Feasibility study  
(c) Both (a) and (b) (d) None of these

**OR**

To provide a rational basis for developing goals and strategies for business growth an entrepreneur must do environmental scanning. Information can be taken from which of the following sources?

- (a) Trade Publications (b) Government Publications  
(c) Consumer Publications (d) All of these  
10. Globalisation and increased customer expectation lead to the changing business world in terms of \_\_\_\_\_ [1]  
(a) Organisation (b) ways of working (c) use of technology (d) All of these

**OR**

Which of the following statements is False in context with modern markets?

- (a) Market is only a place where business is conducted  
(b) Market means People  
(c) Markets are people with money to spend  
(d) Markets are people with money to spend and desire to spend it

11. Which of the following is an uncontrollable and non paid form of promotion tools?  
(a) Advertising (b) Personal selling (c) Publicity (d) None of these [1]

**OR**

It is commonly observed that the prices of air ticket vary depending on the season, date and demand. It is also observed that two Travelers got the same ticket to the same destination at different prices. The pricing method used by Air lines is an example of \_\_\_\_

- (a) Cost Plus pricing (b) Variable Pricing  
(c) Market rate method (d) None of these

State True or False for the following statements: [Q.No 12 To Q.No.15]

12. 'The combination of Debt and Equity will give a better shape to the financial structure.' [1]

**OR**

'Liberalisation of economic policies followed by Indian government since 1991 strengthened the role of private sector enterprises.'

13. 'Contracts with vendors and financial institutions are components of financial plan.' [1]

14. 'A Feasibility study is not a business plan, but serves as a foundation for developing a business plan,' [1]

15. 'e-Commerce is wider than e-Business in its scope.' [1]

16. 'Tata' manufactured a motor car 'Nano' for common man which is very low in price. Identify the behavioural characteristic that develops the idea of 'Tata' into available and successful project. [1]

- (a) Creativity (b) Innovation (c) Invention (d) None of these

17. Prakash is the owner of a rain coat manufacturing unit. During the month of June, in anticipation of increase in demand, he produced 1,000 rain coats. Total cost of production for rain coats was Rs. 1,00,000. Out of these, Rs. 20,000 were fixed expenses. Unit cost per rain coat is \_\_\_\_ [1]

- (a) Rs.8 (b) Rs.80 (c) Rs.800 (d) None of these

Read the following paragraphs and answer questions from 18 To 21:

The Story of Kellogg: In 1894, Dr. John Harvey Kellogg was superintendent of a famous hospital and health spa in Battle Creek, Michigan. His younger brother, Will Keith Kellogg, was the business manager. The hospital stressed healthful living and kept its patients on a diet that eliminated caffeine, meat, alcohol and tobacco.

The brothers invented many foods that were made from grains, including a coffee substitute and a type of granola, which they forced through rollers and rolled into long sheets of dough. One day, after cooking some wheat, the men were called away. When they finally returned, the wheat had become stale. They decided to force the tempered grain through the rollers anyway.

Surprisingly, the grain did not come out into long sheets of dough. Instead, each wheat berry was flattened and came out as a thin flake. The brothers baked the flakes and were delighted with their new invention. They realized that they have discovered a new delicious cereal, but they had no way of knowing that they had accidentally invented a whole new industry. Will Keith Kellogg eventually opened his own cereal business and its most famous product is still sold today. It wasn't until 1906 that Kellogg's Corn Flakes were made available to the general public.

18. Kellogg's Corn Flakes is an example of \_\_\_\_\_ [1]  
(a) Innovation (b) Invention (c) Creativity (d) None of these
19. Entrepreneurs are \_\_\_\_\_ [1]  
(a) Problem Solvers (b) Risk bearers (c) Innovators (d) All of these
20. Kellogg's Corn Flakes were made available to public in \_\_\_\_\_ [1]  
(a) 1894 (b) 1906 (c) 1916 (d) None of these
21. State True/False for the following:  
'Will Keith Kellogg, the founder of Kellogg's Corn Flakes was a Social entrepreneur' [1]
22. Differentiate between Entrepreneurship and Social entrepreneurship. [2]
23. e-Business's growing popularity is an indication of global development. Explain its role by giving any four points. [2]
24. Explain any two advantages of Entrepreneurship. [2]
25. What is the present entrepreneurial scenario in India? Explain briefly. [2]

### OR

Give a short note for the following:

- (i) Spontaneous entrepreneurs  
(ii) Induced entrepreneurs
26. List any four elements/components of Financial Plan. [2]
27. What do you mean by Place Mix? Give the classification of channels of distribution. [3]
28. Fixed cost of a Trader dealing in supply of Coffee is Rs. 840, The Selling Price per cup is Rs. 10 and the Variable cost (unit cost) is Rs. 7 per cup. Find out the B.E.P. [3]
29. Explain why there is a growing need of Social entrepreneurship? Give any two examples of social entrepreneurs of India. [3]

**OR**

What is the role of Technology and Social Media in creating new forms of business? Explain with the help of any three points briefly.

30. 'The growth of a start up depends more on entrepreneur's talent than on the business he/she chooses.' Explain any four competencies of an entrepreneur in the light of the given statement. [4]
31. What do you mean by Market Environment? Explain any three micro environmental forces. [4]

**OR**

What do you mean by Market survey? List any six methods used in market survey.

32. What do you mean by Cost? Explain its types . [4]
33. Explain the need of Entrepreneurship . (Any four points) [6]

**OR**

Explain the promotional functions of an entrepreneur.

34. Write short notes for the following Business Resources:  
(i) Human Resources  
(ii) Financial Resources  
(iii) Material Resources [6]
35. Viral a new generation high tech farmer is involved in organic farming. He realized that there was a huge market for his fruits and vegetables as people have become health conscious and prefer to eat healthy food. Keeping in mind, he decided to open organic fruit juice corner outside central parks and in prominent malls in Jaipur. Now he needed, a 'road map' a written summary, for himself, that defines the objectives, strategies, customer segments, sales forecast etc. to start the venture.
- (a) What do you mean by 'road map' in the above paragraph?  
(b) State the purposes of the concept identified in (a) above. [1+5=6]

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# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2020-21)

Class:- XI

Time- 3 Hrs.

Subject:- Physical Education

M.M-70

## General Instruction:-

1. The question paper contains 30 questions and all are compulsory
2. Question 1 to 12 carry 1 mark each
3. Question 13 to 16 carry 2 marks each and shall not exceed 40-60 words
4. Question 17-26 carry 3 marks each and shall not exceed 80-100 words
5. Question 27 to 30 carry 5 marks each and shall exceed 150-200 words

1. The world war lead to cancellation of how many Olympic Games: [1]
  - a. One
  - b. Two
  - c. Three
  - d. Four

OR

Father of Modern Olympic Games Pierre, Baron de Coubertin was born in Paris on \_\_\_\_\_.

- a. 1 January 1861
  - b. 1 January 1862
  - c. 1 January 1863
  - d. 1 January 1864
2. Substances that remove fluids from body specially water are called\_\_\_\_\_. [1]
    - a. Anabolic Steroids
    - b. Stimulants
    - c. Diuretics
    - d. Stimulants
  3. Which types of skills are brief and have a clear-cut beginning and end: [1]
    - a. Serial Skill
    - b. Discrete Skill
    - c. Fine Skill
    - d. None of the above

OR

Which types of skills are not under control and are unpredictable in nature:

- a. Closed Skill
- b. Simple Skill
- c. Fine Skill
- d. Open Skill

4. Posture is also defined in Yoga as\_\_\_\_\_ [1]

- a. Pranayama
- b. Asana
- c. Samadhi
- d. Niyama

5. Motto of Deaflympics is\_\_\_\_\_ [1]

- a. Spirit in Motion
- b. Share the Dream
- c. Games for Everyone
- d. Equality through Sports

6. Under Khelo India Programme 5 lakh rupees scholarship for talented players is for how many years? [1]

- a. Six
- b. Seven
- c. Eight
- d. Nine

7. Health-Carter measurement system is used to measure\_\_\_\_\_ [1]

- a. Fat percentage
- b. Somatotype
- c. Bone density
- d. All of the above

OR

Body composition can be measured by using an instrument called\_\_\_\_\_.

- a. Calipers
- b. Dynamometer
- c. Stadiometer
- d. Anthropometer

8. Which is not a Part of the Grand slam in Tennis: [1]
- Wimbledon
  - French Open
  - Davis Cup
  - US Open

9. Who said "A sound mind is in a sound body". [1]
- Plato
  - Morgan
  - Throndike
  - Williamson

10. Given below are the two statement labeled Assertion "A" and Reason "R" [1]

Assertion: Special Olympics were started by "John F Kennedy". Sister of "Eunice Kennedy Shriver", the formal president of USA.

Reason: Oath of Special Olympic is: "Let me win. But if I cannot win, let me brave in the attempt".

- Both "A" and "R" are true and "R" is the correct explanation of "A"
  - Both "A" and "R" are true but "R" is not the correct explanation of "A"
  - "A" is true but "R" is false
  - "A" is false but "R" is true
11. Skeletal muscles are found \_\_\_\_\_. [1]
- Attached to the bones
  - In the Heart
  - In the Stomach
  - In the Intestine

12. Match list I with list II and select correct answer from the code given below: [1]

LIST-I		LIST-II	
a.	Paralympic Games	i	1927
b.	Olympic Motto	ii	1896
c.	Summer Olympics	iii	1960
d.	IOA	iv	1895

	i	ii	iii	iv
a	i	iv	ii	iii
b	iii	iv	ii	i
c	iii	i	iv	ii
d	iii	iv	i	ii

13. Enlist the performance enhancing substances and explain any one of them in brief? [2]

14. Differentiate between Growth and Development? [2]

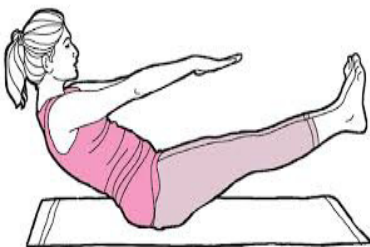
**OR**

Describe the developmental characteristics during childhood.

15. Identify the below given images and write their names: [2]



a. [www.schoolsofyoga.in](http://www.schoolsofyoga.in) \_\_\_\_\_



b. \_\_\_\_\_



c. \_\_\_\_\_





d. \_\_\_\_\_

16. Write a short note of Indian Olympic Association? [2]
17. Explain the importance of Kinesiology in physical education and sports? [3]
18. Explain Autologous and Homologous Blood doping? [3]
19. What is the role of Physiotherapist and Occupational Therapist teacher for children with special needs? [3]
20. Define skeletal system and explain classification of bones? [3]
21. Define Strength and its types? [3]

**OR**

Explain any three components of Wellness?

22. Elaborate Trekking in detail? [3]
23. Elaborate the properties of muscles? [3]
24. Define Equilibrium? And its types with sports related examples. [3]
25. Briefly discuss the need of inclusive Education? [3]
26. Describe the major stretching exercises of muscles for limbering down? [3]

**OR**

Describe any three classifications of skills in detail?

27. Discuss the principles of Sports Training? [5]
28. Elucidate the management of problems of Adolescent? [5]

**OR**

Elucidate the problems of Adolescent in detail?

29. Briefly explain the procedure of Partial curl up and modified pushups? [5]

**OR**

Briefly explain the procedure of Push-ups and Sit and Reach test?

30. Briefly explain the elements of Yoga? [5]

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DELHI PUBLIC SCHOOL  
SAIL TOWNSHIP, RANCHI

ONLINE ANNUAL EXAMINATION  
(SESSION 2020-21)

Class- 11<sup>th</sup>

Subject- Hindustani Music Vocal

Time- 2 hr

Total Marks- 30

खंड-अ

1. बहुवैकल्पिक प्रश्न

- निम्नलिखित में से किन्हीं 15 (पंद्रह) प्रश्नों के सही उत्तर इंगित (✓) कीजिए।
- सभी प्रश्नों के अंक समान हैं। (1×15=15)

1) हिंदुस्तानी संगीत में कितने शुद्ध स्वर हैं?

A) 4 B) 5 C) 6 D) 7

2) निम्नलिखित में से कौन भिन्न है?

A) नाद B) श्रुति C) स्वर D) ताल

3) शुद्ध थाट कौन सा है?

A) काफी B) कल्याण C) विलावल D) भैरवी

4) कौन सा आरोही क्रम में है?

A) म प ध नि सां B) प म ग रे सा C) ध प म ग रे D) नि ध प म ग

5) तानपुरे में तारों की संख्या

A) 3 B) 4 C) 5 D) 7

6) राग भैरवी का वादी- संवादी

A) ग-नि B) म-ध C) म-सा D) ध-ग

7) ताल का एक चक्र क्या कहलाता है?

A) ठेका B) बोल C) आवर्तन D) विवर्तन

8) 'संचारी' भाग है

A) ध्रुपद B) ख्याल C) तराना D) गज़ल

9) उस छोटे से स्वर समूह को क्या कहते हैं, जो संक्षेप में राग का परिचायक हो?

A) बोल-बाँट B) अलंकार C) पकड़ D) स्वर

10) राग भीमपलासी का गायन समय है-

A) प्रातः काल B) दिन का तृतीय प्रहार C) सायं काल D) मध्य रात्रि

11) नोम-तोम आदि निरर्थक शब्दों से युक्त रचना को कहते हैं-

A) कव्वाली B) भजन C) तराना D) ख्याल

12) निम्न में से कौन चौताल में निबद्ध गायन शैली है?

A) ध्रुपद B) तराना C) बड़ा ख्याल D) छोटा ख्याल

13) क्रमिक पुस्तक मालिका के लेखक कौन हैं?

A) प. विनायक राव पटवर्धन B) प. ओमकारनाथ ठाकुर  
C) प. विष्णु नारायण भातखंडे D) प. विष्णु दिगम्बर पुलुस्कर

14) निम्न में से किसे 'विलंबित ख्याल' भी कहा जाता है?

A) मध्यलय B) बड़ा ख्याल C) द्रुत लय D) छोटा ख्याल

15) भातखंडे संगीत संस्थान कहाँ है?

A) चंडीगढ़ B) वाराणसी C) सूरतगढ़ D) लखनऊ

16) एकताल में खाली किस मात्रा पर होती है?

A) पहली व तीसरी B) तीसरी व पाँचवी C) पहली व पाँचवी D) तीसरी व सातवीं

17) राग भीमपलासी की जाति

A) औडव-सम्पूर्ण B) षडव-सम्पूर्ण C) औडव-औडव D) सम्पूर्ण-सम्पूर्ण

18) संगीत में श्रुतियाँ कितनी हैं?

A) 2 B) 7 C) 21 D) 22

19) चौताल में 'तिट' बोल किस मात्रा पर आती है?

A) 8वीं मात्रा B) 9वीं मात्रा C) 10वीं मात्रा D) 11वीं मात्रा

20) ध्रुपद के प्रचार-प्रसार के लिए मध्यकाल के किस राजा को श्रेय जाता है?

A) राजा जय सिंह B) राजा मानसिंह तोमर  
C) कुँवर राणा प्रताप D) राजा सम्मोहन सिंह

21) नाट्यशास्त्र में, सुषिर वाद्यों का वर्णन .....अध्याय में किया गया है।  
A)30वें B)31वें C)32वें D)33वें

**खण्ड-ब**

**(5×3=15)**

**निर्देश-किन्ही तीन प्रश्नों के उत्तर दीजिये। सभी प्रश्नों के अंक समान हैं।**

- 1) ख्याल किसे कहते हैं? ख्याल के कितने प्रकार हैं? विस्तार में समझाते हुए उनमें तुलना कीजिये।
- 2) पंडित वी.एन. भातखंडे को एक महान ग्रंथकार क्यों माना जाता है? उनके ग्रंथों का संक्षिप्त परिचय दीजिए।

**अथवा**

भरत के 'नाट्यशास्त्र' का संक्षेप में वर्णन करे।

- 3) निम्नलिखित रागों को पहचानिए और पहचाने हुए किन्ही एक रागों का पूर्ण परिचय लिखिए।

- म ग् सा रे सा
- नि सा म, म ग्
- सा म ग, प, ग म ग

- 4) तानपुरे के अंगों को सचित्र समझाते हुए वर्णन करें।

**अथवा**

पाठ्यक्रम के किसी राग के द्रुत ख्याल की स्वर लिपि लिखें।

- 5) एकताल और चार ताल में मुख्य अंतर समझते हुए दोनों तालों का ठेका व दुगुन लिखें।



**DELHI PUBLIC SCHOOL**  
**SAIL TOWNSHIP, RANCHI**  
**ANNUAL EXAMINATION (2020-21)**

**Class:-XI**  
**Time- 2 Hrs.**

**Subject:- Odissi Dance**  
**M.M.-30**

**General instructions:**

- Please write down the serial number of the question before attempting it.
- Please check that this question paper contains 8 questions.

1. Complete the following sentences. (1X5=5 Marks)
- a) Indian dance has a \_\_\_\_\_ tradition.
  - b) Dance as an art form involves significant \_\_\_\_\_ movement with rhythm.
  - c) Bharat Muni was the first man to present \_\_\_\_\_ stories through Natya.
  - d) The Devadasi system has started to disappear and it was formally outlawed in India in \_\_\_\_\_ years.
  - e) Mamgala charan is divided in to \_\_\_\_\_ parts.
2. State whether the following are true or false: (1X5=5 Marks)
- a) Usha was daughter of Ravana.
  - b) According to the sangitaratnakar dance is divided into five distinct categories.
  - c) Nrutta is divided into three parts.
  - d) Bisama Nrutya is mainly found in the Kela sampradaya of Odisha.
  - e) Palavi is the fourth part of Odissi dance.
3. Match the following pairs correctly: (0.5X10=5 Marks)
- |                   |                  |
|-------------------|------------------|
| a) Natya          | a) Kapitha       |
| b) Angabhangi     | b) Drama         |
| c) Yakshagana     | c) Tamil Nadu    |
| d) Kummi          | d) Karnataka     |
| e) Mahari         | e) Nrutta        |
| f) Moksha         | f) 112 Slokas    |
| g) Odissi Dance   | g) Oudra Nrutya  |
| h) Nritya         | h) Fith part     |
| i) Bharat Muni    | i) Tempul dancer |
| j) Asamyuta Hasta | j) Two parts     |

4. Write the definition of any two of the followings,  
(Answer to be written in 30 words). (2 Marks)

a) Describe the story of Makhanchor.

**OR**

b) Describe the story of Droupadi cheer haran.

5. a) Describe the story of Natya dharma. (2 Marks)

**OR**

b) Describe the story of Loka dharma.

6. Write the definition of any two of the followings  
(Answer to be written in 60 words). (3 Marks)

a) Matra b) Laya c) Taal d) Abartan

7. State the difference between the following terms: - (3 Marks)

a) Tandava and Lasya

**OR**

b) Palavi and Abhinaya.

8. Attempt any one question. (each question carry 5 marks; Answer to be written  
more than 150 words). (5 Marks)

a) Describe is the important of Mahari in Odissi Dance.

b) Briefly describe the story of Devadashi.

c) Briefly explain about five segment of Odissi Dance.

.....



# DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI

ANNUAL EXAMINATION (2020-21)

Class:-XI  
Time- 1 Hr.

Subject:- General Studies  
M.M.-50

## General Instructions:-

1. There are total THREE Groups.
2. Group-A consists of 5 Small Essay Type Questions.
3. Group-B consists of 5 MCQ Objective Type Questions.
4. Group-C consists of 5 Small Answer Type questions.
5. All Questions are mandatory unless alternative Choice is provided.
6. Always keep margin at the left side of your answer script & clearly write the Question Number.
7. Try to maintain the order of the questions, during innovative & informative answering.

Group : 'A' [Attempt any FIVE ]

[5x8=40]

- (A1) In this year 2021, the topmost Priority, should be to find Jobs for millions unemployed, RATHER than focus on sunset sectors, India requires to focus on those where the Dawn is just breaking. Provide your precious comments.
- (A2) As India enters it's 72<sup>nd</sup> year as a Republic, the time is right to stamp its authority on the world as a global technology leader while bringing the next billion Online. The road to a Digital, ATMANIRBHAR India is well on its way towards technology Leadership. Mention your Views.
- (A3) Melody of Music, expresses the Innermost soul of things, of Actions, and of Ideas?" Our sweetest songs are those that tells of Saddest thoughts". Mention your points.
- (A4) It's well said fact that, A healthy mind resides in a healthy body. Sports provides that necessary exercise to keep the blood flowing and a body robust. A person learns how to handle adversity and yet succeed through perseverance. And, if one just witnesses the economic success of powerful nations in the world, one can realize that, they have a strong Sporting Culture. Justify & mention your innovative points, as future contributions for your country.
- (A5) Give your optimistic Views on the Coveted Saying: "INSTEAD OF CURSING THE DARKNESS, LIGHT A SCINTILLATING CANDLE".

- (A6) There is plethora of FIRSTS to this Union budget, as, It was the first Paperless Budget, in the history of India & BAHU-KHATA was replaced by TABLET. It is also said, that, "Chanakya's principles of collecting taxes like a Honeybee, should have been implemented by honorable FM". Give your focus points on both sides of the coin.
- (A7) During COVID crisis, "On Line Schooling", has been a Substitute for study. Can, It be the future of Education in India? Mention Pluses & Minuses of this system.
- (A8) "Is Working from Home - The Next Big Thing", as Companies & Individuals can exorbitantly minimize their precious resources viz. Time & Money. Mention your view points.
- (A9) India's Education System Leans heavily on Theoretical Learning, while Practical Training Aspects involving 'Working with Hands' & 'Learning by Doing', takes a backseat. Bookish knowledge is rarely supplemented with Industrial Training. Taking rays of Light from new NEP, Explain your creative views.

**Group : 'B' [Attempt any FIVE ]**

**[1x5=5]**

- (B1) This year on the Republic Day parade, India had no any chief guest due to the global situation arising out of the COVID-19 pandemic. In over five decades, this will be the first time that India will not have a foreign head of state as Chief Guest at the Republic Day parade.

In 2000 Republic Day Parade of India, President Mr. Olusegun Obasanjo was the Chief Guest. He belongs to which country?

- a) Algeria                      b) Brazil                      c) Mauritius                      d) Nigeria

- (B2) "I come from a family forged by tragedies and bound by a remarkable, unbreakable love".

Its set will be released on April 6, 2021. The book titled "*Beautiful Things*" is the memoir of whom?

- a) Tucker Carlson              b) Hunter Biden              c) Howard Krein              d) Rudy Giuliani

- (B3) Ayesha Aziz, the 25 -year-old, who is the youngest female pilot in the country, acts as a source of inspiration and a beacon of empowerment for numerous women. She is from which State / UT?

- a) Ladakh                      b) J & K                      c) Uttar Pradesh                      d) Himachal Pradesh

- (B4) In NEP 2020, the current 10+2 system to be replaced by a new curricular structure. Corresponding to ages 3-8, 8-11, 11-14, and 14-18 years respectively. What is this new curricular structure?

- a) 3+4+4+5                      b) 5+3+3+4                      c) 4+3+3+5                      d) 5+4+3+3



- (B5) The Tribal Affairs Minister, Mr. Arjun Munda, launched which portal, to collect data related to the tribal migrant workers. It will also link them to the existing welfare schemes?
- a) Shram Shakti      b) Shram Bhagya      c) ShramVikas      d) Shram Saathi
- (B6) If DECEMBER is AUGUST; MARCH is MAY; SEPTEMBER = SEPTEMBER; OCTOBER is JULY, then JUNE is \_\_\_\_\_.
- a) January      b) April      c) March      d) November

**Group : 'C' [Attempt any FIVE ]**

**[1x5=5]**

- (C1) A recent book, which highlights, the contribution of those heroes, who never appeared in any news. A Penguin published Book : " *TILL WE WIN* ", the Official India narrative for 2020 , has been authored by doctors TRIO : Dr. Chandrakant Lahariya, Dr. Gagandeep Kang & Dr. ----- . ( Fill the Blank, A famous Doctor, always appears in TV & social medias ).
- (C2) For COVID vaccination, "SEERUM INSTITUTE OF INDIA" has been in the News, these days. In which city, this Institute is situated AND What is the Name of it's present CEO ?
- (C3) On 9<sup>th</sup> Feb' 2021, Our Prime Minister became emotional and broke down a couple of times in the Rajya - Sabha while bidding farewell to the Leader of Opposition , who is retiring from the House on February 15. Exhibiting the beauty of Indian democracy, in turn, this stalwart had also tears in his eyes, while recalling their memories of togetherness. He has been in the Rajya Sabha for more than two decades. Identify this veteran Leader.
- (C4) Mr. 'X' had made his Bollywood debut in 1983 with the film 'Ek Jaan Hain Hum'. At the age of 58 years, after suffering from a cardiac arrest, he passed away on February 09, 2021. His kinships are supposed to be like a holy & pure river, in film Industry. He is best known for his performance in 1985's made popular film. Identify Mr. 'X' and Name of the film, who made him popular.
- (C5) (i) I am where,"YESTERDAY follows TODAY AND TOMORROW is in the middle". English mentors always remember and appreciate me. What Am I ?
- (ii) From the beginning of eternity,to the end of time & space, to the beginning of every end & the end of every place, my existence is there. I am one among our 26 good friends group. Who am I?
- (C6) (i) "A three-lettered patriotic movie made in Mauritius". Recently, the hero of this movie was in controversy, for attending Karan Johar's Party. Identify the Film & it's Hero.
- (ii) "Somehow Raid America draws Line inside a circle for us". Always practice Geometry. Half dozen Size. Identify me.

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