DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
SUMMER ASSIGNMENT   (2022-23)

Class - XII   **Subject – English**

1.Read the passage

(1) Have you ever failed at something so miserably that the thought of attempting to do it again was the last thing on your mind?

(2) If your answer is yes, then you should understand that you are not a robot. Unlike robots, we human beings have feelings, emotions, and dreams. We are all meant to grow despite our circumstances and limitations. Flourishing and trying to make our dreams come true feels great when life goes our way. But what happens when it does not? What happens when you fail despite all your hard work? Do you stay down and accept defeat or do you get up again? If you tend to persevere and keep going, you have what experts call 'grit'.

(3) Falling down or failing is one of the most agonising, embarrassing, and scary human experiences. But it is also one of the most educational, empowering, and essential parts of living a successful and fulfilling life. Did you know that perseverance (grit) is one of the seven qualities that has been described as the key to personal success and betterment in society? The other six are curiosity, gratitude, optimism, self-control, social intelligence, and zest. Thomas Edison is an example of grit for trying more than 1,000 times to invent the light bulb. If you are reading this with the lights on in your room, you will realise the importance of his success. When asked why he kept going despite hundreds of failures, he merely stated that they had not been failures, they were hundreds of attempts towards creating the light bulb. This statement not only revealed his grit but also his optimism for looking at the bright side.

(4) Grit can be learnt to help you become more successful. One of the techniques that help is mindfulness. Mindfulness is a practice that makes an individual stay at the moment by bringing awareness of his or her experience without judgement. This practice has been used to quieten the noise of fears and doubts. Through this simple practice of mindfulness, individuals have the ability to stop the self-sabotaging downward spiral of hopelessness, despair, and frustration.

(5) What did you do to overcome the negative and self-sabotaging feelings of failure? Reflect on what you did, and try to use those same powerful resources to help you today.
Moral: Learn from your Mistakes

On the basis of your understanding of the passage, answer any ten questions from the twelve that follow:

(i) The reason why you are not a robot is that:
(a) You fail miserably at tasks
(b) Failure and success can affect your emotions
(c) You work hard
(d) You have limitations

(ii) Choose the option that best captures the central idea of the passage from the given quotes.
"What is the point of being alive if you don't at least try to do something remarkable?"
(1)

—John Green

"Mistakes are the portals of discovery."
(2)

—James Joyce

"Failure should be our teacher, not our undertaker. Failure is delay, not defeat. It is a temporary detour, not a dead end."
(3)

—Denis Waitley

"A person who never made a mistake never tried anything new."
(4)

—Albert Einstein

(a) Option (1)
(b) Option (2)
(c) Option (3)
(d) Option (4)

(iii) What is the tone of the following context: "Falling down or failing is one of the most… educational, empowering, and essential parts of living a successful and fulfilling life."?
a) Humorous
(b) Optimistic
(c) Horrifying
(d) Solemn

(iv) Which of the following is relevant for the title of the passage.
(a) Dreams Always Come True
(b) Failure and Grit Go Hand in Hand
(c) Humans vs Robots
(d) Falling Down and Getting Up

(v) ……………… was created after many attempts.
(a) electricity
(b) light bulb
(c) current
(d) tube light

(vi) Which of the following sentences makes the correct use of "grit", as used in the passage?
(a) Get rid of that grit in your shoes.
(b) She had a bit of grit in her eye.
(c) The road had been covered with grit.
(d) Her grit never made her give up.

(vii) To develop perseverance one must:
(a) become more aware
(b) work hard
(c) be in the moment and be aware without judgement
(d) seek guidance

(viii) How does mindfulness help?
(a) It creates awareness
(b) It quietens the noise of fears and doubts
(c) It helps one become successful
(d) It helps develop focus

(ix) What do you understand from this line, "Falling down or failing is one of the most agonising, embarrassing, and scary human experiences."?
(a) Falling down makes us angry.
(b) Failure can deeply affect our emotions
(c) Stay positive and be optimistic
(d) Self-control is empowering

(x) Choose the option that correctly states the meaning of 'social intelligence' as implied in the passage:
(a) Knowing others
(b) Knowing oneself and others
(c) Knowing oneself
(d) Knowing one's surroundings

(xi) The importance of perseverance and optimism for a successful and fulfilling life is explained using the example of?
(a) Thomas Edison
(b) Flourishing
(c) Grit
(d) Limitations

(xii) What is the message conveyed in the last paragraph of the passage?
(a) Always aim for the best
(b) Live life king size
(c) Through mindfulness we can overcome the negative impact of failure
(d) Social intelligence is crucial for a successful life

2. While walking in a park in your neighborhood you found a small plastic bag containing some documents and some cash. Write a notice in about 50 words to be put on the park notice board asking the owner to identify and collect it from you. You are Amar/Amrita 9399123456.

3.You are Bharat/Bharti of Safdarjung Development Area, New Delhi. You are deeply saddened by the attacks on elderly persons who live alone. Write a letter to the editor of 'The New India News' with 100-120 words making people aware of the authorities to guarantee that such attacks do not occur.

4.Hard work and punctuality are essential for a happy and successful life. They help in meeting the desired targets of our life. You are Kavya/Kanha. Write an article for your school magazine in 150 – 200 words highlighting the importance of hard work and punctuality in a student's life.

5. Read the extract and answer the questions that follow.

When passed the town hall there was a crowd in front of the bulletin board. For the last two years, all our bad news had come from there, the lost battles, the draft, the orders of the commanding officer and I thought to myself without stopping "What can be the matter now?"

i. Why was there a huge crowd in front of the bulletin board?

(a) Due to bad news

(b) Due to order from Berin

(c) Due to introduction of new language

(d) All of these

ii. What was the bulletin board famous for?

(a) Good News

(b) Bad News

(c) Neither good nor bad

(d) Either good or bad

iii. Who is the author of' The Last Lesson'

(a)Selma Lagerlof

 (b) Stephen Spender

(c) Alphonse Daudet

(d) John Updike

iv. What does the word 'Draft' mean here?

(a) Compulsory Military Service

(b) Drawing

(c) Designs of Alsace and Lorraine

(d) Both a and b

6. Read the extract and answer the questions that follow

Driving from my parent's

home to Cochin last Friday morning,

I saw my mother, beside me,

doze, open mouthed, her face

ashen like that

of a corpse and realized with pain

that she was as old as she

looked but soon

put that thought away...

i. The poet described her mother as

(a) beautiful as rose

(b) young and charming

(c) old and pale

(d) kind and loving

ii. "her face ashen like that of a corpse and realized with pain..."

Which poetic device is used in the given lines?

(a) Metaphor

(b) Alliteration

(c) Simile

(d) Personification

iii. Choose the option that best applies to the given extract.

(1) a request

(2) an order

(3) a piece of advice

(4) an argument

(5) a recollection

(6) a suggestion

(a) 1, 3 and 6

(b) 2, 4 and 5

(c) Only 5

(d) Only 1

iv. Choose the option which is not correct as per the above stanza.

(a) As the car travels, the daughter observes her aging mother.

(b) The mother's face appears like ashen.

(c) The pale complexion of the old woman seems her similar to that of a corpse.

(d) The thought of the corpse forces the poet to think of her mother's young age.

7. Answer the questions in 40 -50 words

a)What does the third level refer to? What is the significance of the third level?
b)" This is your last French lesson." How did Franz react to this declaration of M.Hamel?
c) What do the poet's parting words to her mother signify?
d) Do you think Saheb was happy to work at the tea stall? Answer giving reasons.

8. Answer in 120-150 words

a) How is Mukesh's attitude towards his situation different from that of Saheb? Why?
b) Do you think that the third level was a medium of escape for Charley? Why?

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Class - XII   **Subject – Mathematics**

Relation and function

1. Consider two non-empty set A = { a,b,c, } and B = {p, q, r, s }. An **Ordinary Relation R** is defined from **A to B**.
   Answer the following question.
   - A. Find the binary set **A X B.**
   - B. Find the binary set **B X A also.**
   - C. Are **A X B** and **B X A** equal ?
   - D. What is the **cardinality of the set A X B** ?
   - E. What is the cardinality of the set B X A ?
   - F. Do the cardinalities of A X B and B X A equal ?
   - G. What do you mean by the **Power set of A x B**?
   - H. Find the **cardinality of P (A X B).**
   - I. How many relations are possible from A to B?
   - J. Write the **smallest** and **largest relations** from A to B.
   - K. Among all the **relations** possible from A to B how many are **functions from A to B** ?
   - L. From all possible functions from A to B how many of these are **injective function** i.e. **one – one function**?
   - M. How many **surjective i.e. Onto function** do exist here from A to B?
   - N. Does any invertible function exist here from A to B?

2. Consider a non-empty set A = { 1, 2, 3, }. Cartesian product of set A i.e. A X A is called a binary set. Now a Binary relation R is defined on A.
   Answer the following question.
   - A. Find the binary set **A X A.**
   - B. What is the **cardinality of the set A X A** ?
   - C. What do you mean by the **Power set of A x A** ?
   - D. Find the **cardinality of P (A X A).**
   - E. How many relations are possible from A to A?
   - F. Write the **smallest** and **largest relations** from A to A.
   - G. How many Partitions can be done for the set A ?
   - H. How many Equivalence relations are possible on the set A ? List all those equivalence relations.
   - I. From the above obtained list verify that union of two equivalence relations need not be an equivalence relation.
   - J. Write the smallest equivalence relation possible in A.
   - K. Show that intersection of two equivalence relation is always an equivalence relation.
   - L. How many relations on A are reflexive?
   - M. How many relations on A are reflexive only?
   - N. How many relations on A are symmetric ?
   - O. How many relations on A are symmetric but not reflexive?
   - P. How many relations on A are reflexive but not symmetric ?

Q. Among all the **relations** possible from A to A, how many are **functions defined onA** ?

R. From all possible functions from A to A how many of these are **injective functioni.e.one – one function**?

S. How many **surjective i.e. Onto function** do exist here from A to A?

T. How many bijective functions are available on the set A ?

U. Does any invertible function exist here from A to B?

3. Consider a non-empty set A = { 1, 2, 3, 4 }. Now a Binary relation R is defined on A.

A. Find the binary set **A X A.**

B. How many relations are possible from A to A?

C. How many Partitions can be done for the set A ?

D. How many Equivalence relations are possible on the set A ?

E. From all possible functions from A to A how many of these are **injective functioni.e.one – one function**?

F. How many **surjective i.e. Onto function** do exist here from A to A?

G. How many bijective functions are available on the set A ?

H. Does any invertible function exist here from A to B?

4. Let z be the set of all integers and R be the relation on Z defined as
$R=\{(a,b) : a,b \in Z$ and $(a-b)$ is divisible by $5\}$. Prove that R is an equivalence relation. Write all possible equivalence classes available here.

A. Are these classes mutually exhaustive?

B. Are these classes mutually exclusive ?

C. If two elements are taken from two distinct classes. Are these elements related to each other.

5. Let $f: N \to N$ be defined by $f(n) = \begin{cases} \frac{n+1}{2}, & \text{if } n \text{ is odd} \\ \frac{n}{2}, & \text{if n is even.} \end{cases}$

   For all $n \in N$. Find whether the function is bijective ?

6. If $f: R \to R$ be defined by $f(x) = (3-x^3)^{1/3}$ then find fof.

7. Consider $f: R_+ \to [-5, \infty)$ given by $f(x) = 9x^2 + 6x - 5$. Show that f is invertible with $f^{-1}(y) = \frac{\sqrt{y+6}-1}{3}$.

8. Let A=R-{3}and B=R-{1}. Consider the function $f: A \to B$ defined by $f(x) = \frac{x-2}{x-3}$. Show that f is one-one and onto and hence find f^{-1}.

Inverse Trigonometric Function

9. Write the principle value of (i) $\cos^{-1}\frac{1}{2} - 2\sin^{-1}(-\frac{1}{2})$.(ii)$\tan^{-1}\sqrt{3} - \sec^{-1}(-2)$.(iii)$\cos^{-1}\cos\frac{7\pi}{6}$.

10. If $0 < x < 1$, then solve the following for x,$\tan^{-1}(x+1) + \tan^{-1}(x-1) = \tan^{-1}\frac{8}{31}$

11. Evaluate: i)$\tan^{-1}(\tan 5\pi/3)$, ii)$\sec^{-1}(\sec 5\pi/3)$,
    iii) $\cos^{-1}(\cos(-\frac{7\pi}{3}))$, iv) $\sin^{-1}(\sin 17\pi/8)$, v) $\cot^{-1}(\cot\frac{7\pi}{8})$.

12. Prove that: $2\tan^{-1}\frac{1}{5} + \sec^{-1}\frac{5\sqrt{2}}{7} + 2\tan^{-1}\frac{1}{8} = \frac{\pi}{4}$.

Matrix Algebra

13. If A = $\begin{bmatrix} 3 & -4 \\ 1 & -1 \end{bmatrix}$, then prove that $A^n = \begin{bmatrix} 1+2n & -4n \\ n & 1-2n \end{bmatrix}$,where n is appositive integer.

14. Show that (AB-BA) is a skew symmetric matrix for every square matrix A and B.

15. Express the matrix $A = \begin{bmatrix} 1 & 3 & 5 \\ -6 & 8 & 3 \\ -4 & 6 & 5 \end{bmatrix}$ as the sum of a symmetric and a skew symmetric matrix.

16. Solve by matrix method, $5x + 3y + z = 16, 2x + y + 3z = 19$ and $x + 2y + 4z = 25$.

17. If $A = \begin{bmatrix} 1 & 1 & 1 \\ 2 & -1 & 1 \\ 1 & -2 & 3 \end{bmatrix}$ Find A^{-1}. Using A^{-1} solve the following system of linear equations $x + y + z = 3,\ 2x - y + z = 2$ and $x - 2y + 3z = 2$.

18. If a square matrix $A = \begin{bmatrix} 2 & -1 & 1 \\ -1 & 2 & -1 \\ 1 & -1 & 2 \end{bmatrix}$. Verify that $A^3 - 6A^2 + 9A - 4I = 0$. Hence find A^{-1}.

19. Prove that $(AB)^{-1} = B^{-1}A^{-1}$.

20. Find the inverse of a square matrix $A = \begin{bmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}$ using elementary transformation.

21. If $A = \begin{bmatrix} 1 & 1 & 1 \\ 2 & -1 & 1 \\ 1 & -2 & 3 \end{bmatrix}$ Find A^{-1}. Using A^{-1} solve the following system of linear equations $x + y + z = 3,\ 2x - y + z = 2$ and $x - 2y + 3z = 2$.

22. Given $A = \begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$ and $B = \begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix}$. Find AB and hence solve the following system of equations $x - y + z = 4, x - 2y - 2z = 9, 2x + y + 3z = 1$.

Determinant

Without expanding the determinant, prove that

23. (i) $\begin{vmatrix} b+c & c+a & a+b \\ q+r & r+p & p+q \\ y+z & z+x & x+y \end{vmatrix} = 2 \begin{vmatrix} a & b & c \\ p & q & r \\ x & y & z \end{vmatrix}$

(ii) $\begin{vmatrix} 1+a^2-b^2 & 2ab & -2b \\ 2ab & 1-a^2+b^2 & 2a \\ 2b & -2a & 1-a^2-b^2 \end{vmatrix} = (1+a^2+b^2)^3$.

(iii) $\begin{vmatrix} x & y & z \\ x^2 & y^2 & z^2 \\ yz & zx & xy \end{vmatrix} = (x-y)(y-z)(z-x)(xy+yz+zx)$. (iv)

$\begin{vmatrix} a-b-c & 2a & 2a \\ 2b & b-c-a & 2b \\ 2c & 2c & c-a-b \end{vmatrix} = (a+b+c)^3$.

24. Show that $\Delta = \begin{vmatrix} x+a & b & c \\ a & x+b & c \\ a & b & x+c \end{vmatrix} = x^2(x+a+b+c)$.

25. Show that $\begin{vmatrix} (y+z)^2 & xy & xz \\ xy & (x+z)^2 & yz \\ xz & yz & (x+y)^2 \end{vmatrix} = 2xyz(x+y+z)^3$.

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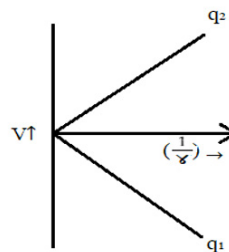## SAIL TOWNSHIP, RANCHI
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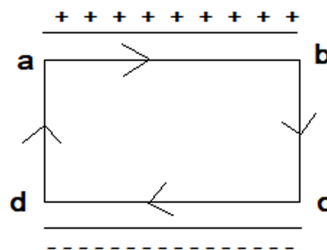**Class - XII**   **Subject – Physics**

Section-A

Answer the following question.

1. What does $q_1 + q_2 = 0$ Signify in electrostatics?
2. A force F is acting between two charges placed some distance apart in vacuum. If a brass rod is placed between these two charges. How does the force change?
3. Two point charge +q and -q are placed a "d" distance apart. Draw the line on which the resultant field is parallel to the line joining the two charges?
4. Define volume charge density at a point. Write its SI unit.

5. The electric potential is constant is a give region. what can you say about the electric field there?

6. The two graphs drawn here, show the variation of electrostatic potation (V) with 1/r (r being distance of the field point from the point charge) for two point charges q_1 and q_2.
   (i) What are the signs of the two charges?
   (ii) Which of the charge has a larger magnitude and why?

7. Is the capacitance C of a capacitor proportional to the charge Q ?

8. A thin metal sheet is placed in the middle of a parallel plate capacitor what will be the effect on the capacitance?
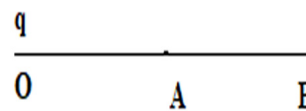
Section-B

9. The electric field inside a parallel plate capacitor is E. Find the amount of work done in moving charge q over a closed rectangular loop abcda.

10. How would you connect two capacitors across a battery, in series or parallel, so that they store greater (i) total charge and (ii) total energy?

11. A point charge q is placed at O, as shown in figure
    Is V_A - V_B positive, negative or zero, if q is a
    (i) positive (ii) negative charge?

    q
    _____._____→
    0   A   B

12. Is there any kind martial which when placed between the plates of a capacitor reduces its capacitance?

13. An electric dipole is placed in a uniform electric field E, write the expression for the torque T experienced by the dipole. Show diagrammatically the orientation of the dipole in the field for which the torque is
    (i) Maximum (ii) half the maximum value (iii) Zero.
14. What is an electric line of force? What is its importance?

15. Two point charge + q and – q are placed a "d" distant apart .Draw the line on which the resultant field is parallel the line joining the two charges.

16. Two charge of magnitude -2Q and +Q are located at points (a,o) and (4a,o) respectively. What is the electric flux due to these charges through a sphere of radius 3a with its center at the origin?
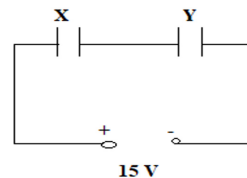
Section-C

17. Define electric flux .Write its SI unit. A spherical balloon carries a charge that is uniformly distributed over its surface. As the balloon is blow up and increases in size, how does the total electric flux coming out of the surface change? Give reason.

18. Five point charges, each of value +q coulomb are placed on five vertices of a regular hexagon of side L meters. Find the magnitude of force on a charge -q Coulomb placed at the centre of the hexagon.

19. An infinite number of charges, each equal to q are placed along x-axis at
    x=1, x=2, x=4, x=8----and so on
    (i) Find the electric field at the point x=0 due to this set up of charges.
    (ii) What will be the electric field, if in the above set up , the consecutive charges have opposite signs.

20. Calculate the electric flux through each of the six faces of a closed cube of length L if a charge q is placed (a) at its centre (b) at one of its vertices.

21. A thin metal sheet is placed is the middle of a parallel plate capacitor. What will be the effect on the capacitance?

22. A parallel plate capacitor is charged to a potential difference "V" by a d.c source. The capacitor is then disconnected from the source. If the distance between the plates is doubled, state with reason how the following will change (i) electric field between the plates (ii) capacitance and (iii) energy stored in the capacitor.

23. A electric dipole of length 2cm is placed with its axis making an angle of 60° to a uniform electric field of $10\square$ N C^{-1}.If it experiences a torque of $8\sqrt{3}$ Nm, Calculate the,
   (i) Magnitude of the charge on the dipole. (ii) Potential energy of the dipole.

24. How would you connect 8, 12 and 24 µF capacitors to obtain (i) minimum   capacitance (ii) maximum capacitance .If a potential difference of 100 volt is applied across the system, what would be the charges on the capacitors in each case?

Section-D

25. A thin semicircular ring of radius a is charged uniformly and the charge per unit length is λ. Find the electric field at its centre?

26. (a) Three charges each equal to q are placed at the three corners of a square of side a find the electric field at the fourth corner.
(b) Two point charges placed at a distance r in air exert a force F on each other. At what distance will these charge experience the same force F in a medium of dielectric constant K?
27. Find the expression for the electric field intensity and the electric potential, due to a dipole at a point on the (i) axial line (ii) equatorial line. Would the electric field be necessarily zero at a point where the electric potential is zero? Give an example to illustrate your answer.

28. Obtain the expression for the capacitors of a parallel plate capacitor, Three capacitors of capacitances $C\square$, C_2 and C^3 are connected (i) in Series (ii) in parallel. Show that the energy stored in the Series Combination is the same as that is the parallel combination.

29. Two parallel plate capacitors X and Y, have the same area of plates and same separation between them. X has air between the plates while Y contains a dielectric medium of relative permittivity 4.
(I)Calculate Capacitance of each capacitor if equivalent capacitance of the combination is 4µF.
(ii) Calculate the potential difference between the plates of X and Y.
(iii) what is the ratio of electrostatic energy stored in X and Y?

30. (a) State the theorem which relates total charge enclosed within a closed surface and the electric flux passing through it. Prove it for a Single point change.
 (b) Using this law, obtain the expression for the electric field due to an infinitely long Straight Conductor of linear charge density λ.

ELECTROCHEMISTRY NUMERICALS

1) The conductivity of 0.1M KCl solution is 1.29S/m.If The resistance of the cell filled with 0.1M KCl is 100 ohms , Calculate the cell constant.

2) Using Kohlrausch law ,calculate Λ_0 for acetic acid , if Λ_0 values of HCl ,NaCl and CH_3COONa are respectively 426,126 and 91 Scm^2mol^{-1}.

3) If resistivity of 0.8 M KCl solution is 2.5 x 10^3 cm, Calculate Λ_m of the solution.

4) The measured e.m.f at 25°C for the cell reaction. $Zn(s) + Cu^{2+}(1.0M) \rightarrow Cu(s) + Zn^{2+}(0.1M)$ Is 1.3 volt. Calculate E° for the cell reaction.

5) Calculate $E°_{cell}$ (at 298K) of $Zn(s)/ZnSO_4$ (aq) // $CuSO_4(aq)/Cu(s)$ Given that $E°_{Zn/Zn2+}(aq)$ = 0.76 V $E°_{Cu/Cu2+}(aq)$ = -0.34 V.

6) A current of strength 2.5 ampere was passed through $CuSO_4$ solution for 6minutes 265 seconds .How much amount of copper will be deposited(At Wt of Cu=63.5), 1F=96500Couloms.

7) If three Faradays(F)of electricity is passed through the solutions of $AgNO_3$,$CuSO_4$ and $AuCl_3$, what will be the molar ratio of the cations   deposited at the cathode.

8) How much charge is required to liberate 11.5g of Sodium.

9) The standard emf of a cell having one electron change is found to be   0.591V at 25°C .what will be the equilibrium constant of the eaction.

10) Given $E°_{Cr3+/Cr}$ = - 0.72 V, $E°_{Fe2+/Fe}$ = -0.42 V. What will be the potential for the cell Cr/Cr^{3+} (0.1M) // Fe^{2+}(0.01M)/Fe.

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Class - XII   **Subject – Biology**

CHAPTER - 1
REPRODUCTION IN ORGANISMS

I. Short Answerquestions:

1. Why are Chara and Marchantia are referred to as monoecious and dioecious plants?
2. Mention the unique flowering phenomenon exhibited by *Neelakuranji* and Bamboo plant.
3. Offspring derived by asexual reproduction are called clones. Justify giving two reasons.
4. What are zoospores? Why are they referred so?
5. What is parthenogenesis? Give an example.

II. Long Answerquestions:

6. Mention the three phases in the life cycle of plants and animals.
7. Write the name of the organism that is referred to as the 'Terror of Bengal'. Why is it called so? What is the nature of the water body in which it grows abundantly?
8. Give one example of each that reproduces by
   (a) Rhizome   (b) Tuber   (c) Conidia   (d) Bulbil   (e)Gemmules (f)Leaf buds
9. Describe the post fertilization changes in a flower.
10. Differentiate between the following:
(a) Gametogenesis and embryogenesis
(b) Oestrus cycle and menstrual cycle
(c) Parthenogenesis and parthenocarpy
(d) Oviparous and viviparous
(e) Unisexual and bisexual flower

CHAPTER - 3
HUMAN REPRODUCTION

I. Short answer questions:

1. What stimulates pituitary to release the hormone responsible for parturition? Name the hormone.
2. Mention the difference between spermiogenesis and spermiation.
3. How is the entry of only one sperm and not many ensured into an ovum during fertilization inhumans?
4. Where are Leydig cells present ? What is their role in reproduction?
5. Placenta acts as an endocrine tissue. Justify.

II. Long answerquestions:

6. Differentiate between gametogenesis in human males and females on the basis of (i) Time of initiation of the process. Products formed at the end of the process.
7. Draw a diagrammatic sectional view of human ovary showing different stages of oogenesis alongwith corpus luteum.
8. Explain the process of fertilization in human female. Trace the post-fertilization events in sequential order up to implantation of the embryo.
9. Draw a schematic diagram of human sperm and label the cellular componentsgive the functions of any three parts.
10. Explain the ovarian and uterine events that occur during a menstrual cycle in a human female under the influence of pituitary and ovarian hormones respectively.

1. What are the component cells of the egg apparatus in an embryo sac?

2. What is common in the function performed by nucellus and cotyledon?

3. During polyembryony, if one embryo is formed from synergids and the other from nucellus, state the one that is haploid and the one that is diploid.

4. Is it possible that an unfertilized apomictic embryo sac gives rise to a diploid embryo? Give a reason in support of your answer.

5. Does apomixis require fertilization and pollination? Give reasons in support of your answer.

6. What is pollination? List out the agents of pollination

7. How does a chasmogamous bisexual flower prevent self-pollination?

8. How do self-incompatibility restrict autogamy? How does pollination occur in such plants?

9. Explain the term polyembryony. How is it exploited commercially?

10. Describe the structure of the embryo sac of a mature angiosperm. Explain the role of synergids in it.

CLASS-XII BIOLOGY

(A) Very Short Answer Type Questions (1 mark each)

1. Expand the term RCH care.
2. List one drawback of surgical methods of birth control.
3. How do the IUDs prevent fertilization?
4. Expand the term GIFT.
5. Up to which stage can the young embryo be maintained *in vitro* under aseptic conditions?
6. List causative agents of the following STDs/STI.
   (a) AIDS   (b) Gonorrhoea
7. Name the organization that produced 'Saheli' pill.
8. How do oral pills help in birth control? Name common pills used.
9. Define medical termination of pregnancy (MTP).
10. Mention two factors which are considered responsible for the increase in humanpopulation.
11. Name the technique by which one can detect any possible chromosomal or metabolic disorder in developing foetus in a pregnant woman.
12. What is the advantage of the technique aminiocentesis?
13. At what stage is the embryo implanted in the uterus of the mother in the case of test tube baby?
14. Name the fluid from which foetal cells are obtained for chromosomal analysis.
15. Who is a surrogate mother?
16. What is meant by replacement level with reference to human population growth?
17. Mention any two probable reasons for rapid riseof population in our country from about 350 million at the time of independence to about 1.2 million at the time of independence to about 1.2 billion by the year 2011.
18. After a successful in vitro fertilization, the fertilized egg begins to divide. Where is the egg transferred before it reaches the 8-cell stage and what is this technique named?

(B) Short Answer Type-1 Questions (2 Marks each)

1. What is vasectomy?
2. What is tubectomy?
3. List some reasons of infertility.
4. List various natural methods of birth control.
5. What does ICSI stand for? Describe the technique.
6. Define chemical methods of birth control.
7. What are implants? How do they help in preventing the fertilization?
8. List ill-effects of overpopulation?
9. How are test tube babies different from the normally produced babies?
10. What are test tube babies? Can test tube babies improve the human race? Discuss.

11. In the table given below, select and enter one correct device out of the following:
    Oral pills, Condom, Copper-T, Saheli, Vasectomy, Diaphragm, Tubectomy, Cervical cap.

Method of birth control	Device
(a) Barrier	
(b) IUDs	
(c) Surgical Technique	
(d) Administering Hormones	

(C) Short Answer Type-II Questions (3 marks each)

1. Briefly explain natural methods of birth control.
2. What do you mean by STDs/STI?
3. Describe briefly India's initiative in attaining total reproductive health.
4. Describe infertility in human beings
5. Why is medical termination of pregnancy carried out? Is this legalized in India?
6. Define gamete intra-fallopian transfer (GIFT).
7. Write briefly about the surgical methods of birth control.
8. A particular technique helps to diagnose chromosomal disorders in an unborn foetus. What is the name of this technique and how is it performed?
9. Name a prenatal diagnostic technique. List the steps involved in carrying out this technique?
10. Name any three methods of contraception. Explain any two of these.
11. Discuss the amniocentesis along with its misuse
12. What is amniocentesis? What is its advantage?
13. Name and describe a technique by which genetic disorder in the developing foetus can be detected.
14. Name some assisted reproductive technologies which have decreased the number of cases of infertile couples.
15. Describe the methods of birth control by which fertilization of ovum by sperm is prevented.
16. Suggest the measures for the control of human population.
17. Briefly outline the reasons for human population explosion.
18. Define gonorrhoea and syphilis.

D. Long Answer Type questions (5 marks each)

1. Discuss the problems and strategies of reproductive health in human beings.
2. Describe various types of birth control measures.
3. List some common STDs and their causativeagents. How can these be prevented?
4. Explain various special techniques used in assisted reproduction technologies (ART).
5. Write short notes on (a) MTP, (b) ART.
6. What do mean by Reproductive health?

7. Define population explosion and explain the factors affecting the human population.
8. Briefly describe the government's efforts to achieve the goals of Reproductive health.
9. How is overpopulation responsible for Ecodegradation?
10. Explain the functioning of oral contraceptives.
11. What is the significance of legalizing MTP?
12. Discuss the role of primary health centres in relation to mother and child health and family planning.

DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
SUMMER ASSIGNMENT   (2022-23)

Class - XII   **Subject – Computer Science**

Q.1. Write a Python Program to shift elements of a list so that the first element moves to the second index and second index moves to the third index, and so on, and the last element shifts to the first position.

Suppose the list is [10, 20, 30, 40]

After shifting, it should look like: [20, 30, 40, 10]

Q.2. A list Num contains the following elements:

   3, 25, 13, 6, 35, 8, 14, 45

Write a function to swap the content with the next value divisible by 5 so that the resultant list will look like:

   25, 3, 13, 35, 6, 8, 45, 14

Q.3. Write a program to accept values from a user in a tuple. Add a tuple to it and display its elements one by one. Also display its maximum and minimum value.

Q.4. Write a program to store student names and their percentage in a dictionary and delete a particular student name from the dictionary. Also, display the dictionary after deletion.

Q.5. Write a python program to capitalize first and last letters of each word of a given string.

Q.6. Pinnacle Academy is transforming its result processing unit into computerized "Student Management System". Help the institution to develop an integrated solution using concepts of Python list for adding new students to the existing list of students on the basis of marks obtained by them. (We assume the marks of ten students in the class).

The entire processing system should support adding of updated marks, deleting the marks of students who have left the institution, followed by generating a report by arranging the marks of all the students in both ascending and descending order.

It should also include insertion and deletion of students' marks at desirable position. Develop a Python program for the above scenario-based implementation.

Q.7. State the concept of RDBMS. What are its features.

Q.8. What is a NOT NULL constraint.

Q.9. What is the difference between WHERE and HAVING clause?

Q.10. What is the difference between PRIMARY key and FOREIGN Key constraint.

Q.11. What is the difference between DROP and DELETE command.

Q.12. How can you eliminate duplicate records in a table with select query?

Q.13. What is an ORDER BY clause GROUP BY clause?

Q.14. Consider the following two tables: PRODUCT and CLIENT

Table: Product

P_ID	ProductName	Manufacturer	Price	ExpiryDate
TP01	Talcum Powder	LAK	40	2011-06-26
FW05	Face Wash	ABC	45	2010-12-01
BS01	Bath Soap	ABC	55	2010-09-10
SH06	Shampoo	XYZ	120	2012-04-09
FW12	Face Wash	XYZ	95	2010-08-15

Note:

- P_ID is the Primary Key.

Table: Client

C_ID	ClientName	City	P_ID
1	Cosmetic Shop	Delhi	FW05
6	Total Health	Mumbai	Bs01
12	Live Life	Delhi	SH06
15	Pretty One	Delhi	FW05
16	Dreams	Bengaluru	TP01
14	Expressions	Delhi	NULL

Note:

- C_ID is the Primary Key
- P_ID is the Foreign Key referencing P_ID of Client table

Write SQL statements for the queries (i) to (iv) and output for (v) and (vi):

- **(i)** To display the ClientName and City of all Mumbai and Delhi based clients in Client table.
- **(ii)** Increase the price of all the products in product table by 10%.
- **(iii)** To display the ProductName, Manufacturer, ExpiryDate of all the products that expired on or before '2010-12-31'.
- **(iv)** To display C_ID, ClientName, City of all the clients (including the ones that have not purchased a product) and their corresponding ProductName sold.
- **(v)** select count(distinct Manufacturer) from Product;
- **(vi)** select C_ID, Client_Name, City fromClient where City like 'M%';

Q.15. Consider the following tables: STOCK and Dealer.

Table: STOCK

ItemNo	Item	Dcode	Qty	UnitPrice	StockDate
5005	Ball pen 0.5	102	100	16	2011-03-31
5003	Ball Pen 0.25	102	150	20	2010-01-01
5002	Gel Pen Premium	101	125	14	2010-02-14
5006	Gel Pen Classic	101	200	22	2009-01-09
5001	Eraser Small	102	210	5	2009-03-19
5004	Eraser Big	102	60	10	2010-12-12
5009	Sharpener Classic	103	160	8	2010-01-23

Note:

- ItemNo is the Primary Key
- Dcode is the Foreign key referencing Dcode of Dealer table

Table: Dealer

Dcode	DName
101	Reliable Stationers
103	Class Plastics
104	Fair Deals
102	Clear Deals

Note:

- Dcode is the Primary Key

Write SQL statements for the queries (i) to (iv) and output for (v) and (vi):

(i) To display details of all the items in the Stock table in ascending order of StockDate.

(ii) To display details of those items in Stock table whose Dealer Code(Dcode) is 102 or quantity in Stock(Qty) is more than 100.

(iii) To insert a record in the Stock table with the values:
(5010, 'Pencil HB', 102, 500, 10, '2010-01-26')

(iv) To display Dcode, Dname from Dealer table and item, UnitPrice from Stock table of all the Dealers (including the dealer details that have not sold any item)

(v) select count(distinct Dcode) from Stock;

(vi) select Qty * UnitPrice from Stock where ItemNo=5006;

DELHI PUBLIC SCHOOL
SAIL TOWNSHIP, RANCHI
SUMMER ASSIGNMENT   (2022-23)

Class - XII   **Subject – Information Practices**

SECTION-A

1. **Write Python code to print:**
   ```
          #
        # # #
      # # # # #
        # # #
          #
   ```

2. **Write a Python program to enter a number and show the Reverse of it and also print that it is Palindrome or not**

3. **Write a Python program to create a Dictionary of object name Subj holding 5 items, by inputting Section (A, B, C, D, E) as the Key and 5th subject (PhE, CS, IP, Eco, FAG) as the corresponding Value of the key and finally display the items.**

4. **Here is a list [[1,2,3] , [4,5,6] , [7,8,9] , [10,11,12]] and answer questions as asked below:**
   (a) Create an array of NumPy and display the whole array.
   (b) Print the elements of first two rows and last two columns of the array.

5. **Write the outputs of the following statements:**
   ```
   Lst=[10, 20, 30, 40, 50]
   Lst.append(60)
   print(Lst)
   Lst.insert(2, 25)
   print(Lst)
   L1=[100,200]
   Lst.extend(L1)
   print(Lst)
   Lst2=[10,30,50,40,20]
   Lst2.sort(reverse=False)
   print(Lst2)
   ```

6. **Write to code as asked using NumPy:**
   ```
   L1=[[1,2,3],[4,5,6]]
   L2=[7,8,9]
   ```
   (a) Create an Array of L1 & L2
   (b) Find the sum of the arrays
   (c) Find the sum of element of array of L1 row & column wise
   (d) Reshape the array of L1 into 3X2 Matrix

7. **Rohit wants to create a list of some tasks, but he is not able to go through to reach to the solution. You help him to solve his problems as given below:**
   a) A list of n elements of initialized by 0 (zero) and display.
   b) Input values to the list entered by the user.
   c) Then get the sum of the elements & print.

SECTION-B

1. Write Python code to create the following DataFrame books using Python Pandas. Use any method of DataFrame creation that you have learnt:

BookName	Class	Price
Let us C	BCA	270
Artificial Intelligence	B.Tech	350
Database Management	BCA	450
Computer Architecture	BCA	550

2. What will be the output of the following program:
```
import pandas as pd
a=pd.Series([10,20,30,40,50],index=['a','e','i','o','u'])
print(a*5)
print(a<30)
a['i']=1000
print(s)
```

3. What is the output of the following code:
```
import pandas as pd
s = pd.Series([10,20,30,40,50,60,70,80,90,100])
a=s.where(s > 50)
print(a)
```

4. Consider the following DataFrame 'df_Student':

AdmNo	Name	Class	Weight	Height
H1001	Tiana	IX B	50	163
H1006	Jiya	IX A	55	167
H1009	Shreyas	IX A	59	164

(i) Write the command to add a new column 'Age' having the following data: Age= (13,15,14)
(ii) Write a command to permanently delete the record of student having AdmNo H1009.
(iii) Write a command to display records in ascending order of age.

5. A dictionary 'toys' contains the following:
```
toys={  'Name': ['Talking Tom', 'Blocks','Number game', 'ludo'],
        'Price':[400,250, 300,150]}
```
Write statements for the following:
(i)   Create a Dataframe named "stock"
(ii)   Add a column called 'discount' with the following
         data: [30, 40, 15, 25]
(iii)   Delete column discount with all values.

6. Assume a dataframedf that contains data about IT Quiz Contest with 'SC1','SC2','SC3','SC4','SC5' as indexes shown below. Give the output of any four questions from (i) to (v).

	School	Total_Students	Winner	Runner-up
SC1	APS	40	32	8
SC2	KPS	30	18	12
SC3	KKPS	20	18	2
SC4	MMPS	18	10	8
SC5	TPS	28	20	8

(i)   >>>df.shape
(ii)   >>> df1[1:3]
(iii)   >>>df.loc['SC2' : 'SC4' , 'Winner': 'Runner-up']
(iv)   >>>df.iloc[2:4]
(v)   >>>df.iloc[:,2].max(axis=0)

7. Write a Pandas program to create a DataFrame on the dictionary given below and answer the following questions:
    cars = {   'Brand': ['Honda Civic','ToyotaCorolla','FordFocus','Audi A4'],
        'Price': [22000,25000,27000,35000],
        'Year': [2015,2013,2018,2018]
            }
(i)   Display the DF in descending order on Brand.
(ii)   Replace the row index by 'zero', 'one', 'two',…..
(iii)   Change the column name 'Price' by 'Cost'
(iv)   Access/print the values of last two columns.
(v)   Print the values of last three rows.
(vi)   Print the values of 1,2,3 row-index of 1,2 column-index.

8.Find the output of the following code:
    import pandas as pd
    data = [{'a': 10, 'b': 20},{'a': 6, 'b': 32, 'c': 22}]
    df1 = pd.DataFrame(data, index=['first', 'second'], columns=['a', 'b'])
    df2 = pd.DataFrame(data, index=['first', 'second'], columns=['a', 'b1'])
    print(df1)
    print(df2

9.Write the output of the following code:
    import pandas as pd
    l1=pd.DataFrame([[1,2],[3,4]], columns=['a', 'b'])
    l2=pd.DataFrame([[5,6],[7,8]], columns=['a', 'b'])
    df=l1.append(l2)
    print(df)

10. Write the SQL commands of the followings based on the two tables.

Table: **STUDENT**

Table

STDCODE	NAME	CLASS	SECTION	AVGMARK	DOB
S009	AJAY MALHOTRA	11	A	86.55	12-DEC-1995
S010	KUSUM VIMANI	12	C	79.85	22-MAR-1994
S012	SARITA VERMA	12	C	98	23-JAN-1992
S015	KAILASH SINGH	10	D	78.45	5-OCT-1993
S020	SANJAY SRIVASTAVA	11	K	85.45	10-MAY-1990
S033	KAVITA SAXSENA	9	K	66.50	12-SEPT-1993
S052	BIJAY MAJUMDAR	12	B	88	5-NOV-1989

:**CLASS**

STDCODE	SECTION	ADDRESS	DOA
S009	A	RANCHI	12-MAR-2001
S010	C	PATNA	20-MAR-1999
S012	C	TATA	13-FEB-2000
S013	D	DHANBAD	15-JULY-1999
S022	L	KOLKATA	10-MAR-2002
S033	K	SILLIGURI	5-MAY-2004
S052	B	BHUBANESWER	15-DEC-2003

1) Create the table Student, using constraints NOT NULL, UNIQUE, PRIMARY KEY, FOREIGN KEY, CHEQUE, DEFAULT value "RANCHI" for Address in appropriate attributes/fields/columns.
2) Enter a new record: S009, Swapan Pal, 11, E, 80.5, 15-8-1991.
3) Re-arrange the records in descending and ascending order on Date of Birth.
4) Display the Name Class Age and Date Of Birth of the students who have either less than 80 Average Marks, or year of birth before 1993.
5) Display the Name, Admission no and Date of Birth of those whose 1st character of name is **K**.
6) Display the Name, Admission number and Date of Birth of those where 7th latter of address is **A.**
7) Display the Different Sections present in the table.
8) Display the Different Sections and their corresponding numbers present in the table.
9) Replace the Name Ajay Malhotra by "Ajit Mahapatra".
10) Increase each of the Average Mark by 2.0.
11) Display number of records present in the table.
12) Display Numbers of each section in the table of those who got Average Marks more than 75.
13) Include a new column Address in the table.
14) Delete the same column.
15) Make the column Admission number as a Primary Key.
16) Remove the existing record(s) of all who are not from classes 11 or 12.
17) Display the Maximum Average Marks from each section.
18) Display the Minimum Average Marks from each section.
19) Display the Total Average Marks of the table.
20) Display the values of Name and Date of Birth close together (concatinate).
21) Show the Name and number of characters of each name.
22) Show the first character of each name as Capital.
23) Show the each of the names in capitals and small as well separately.
24) Locate position of the character **'A'** in each of the name.
25) Display rest of the blank characters of a described field by **' * '.**
26) Remove all of the blank spaces from name field.

Class - XII   **Subject – Economics**

1. State the two components of money supply.

2. What is Cash Reserve Ratio?

3. Find Net Value Added at Factor Cost:

       (Rs. Lakh)

(i) Sales	100
(ii) Closing Stock	20
(iii) Excise	15
(iv) Opening Stock	10
(v) Depreciation	12
(vi) Intermediate Consumption	50

4. Increase in per capita real income means increase in per capita availability of goods and services. Does it necessarily mean rise in the welfare of the people of the country? Give any one argument in support of your answer and explain the same.

5. During a given year nominal national income increased by 14 percent while the real national income increased by only 6 percent. Population increased by 2percent. What has caused the difference between nominal income and realincome? What is real per capita income?

6. From the following data calculate (a) Gross domestic product at factor cost and (b) Factor income to abroad :

a) Compensation of employees --- 800

b) Profits --200

c) Dividends --50

d) Gross national product at market price--------------------------------------1400

e) Rent --150

f) Interest ---100

g) Gross domestic capital formation --300

h) Net fixed capital formation --200

i) Change in stock ---50

j) Factor income from abroad ---60

k) Net indirect tax--120

7. How should the following be treated while estimating national income? Give reasons.

A) Imputed rent of self-occupied houses.

B) Value of bonus shares received by shareholders of a company.

C) Purchase of taxi by a taxi driver.

8. How 'distribution of GDP' is a limitation in taking GDP as an index of welfare? Explain.

9. From the following data calculate Gross national product at market price by (a) Income method and (b) expenditure method:

i) net domestic capital formation	375
ii) compensation of employees	600
iii) net indirect taxes	150
iv) profit	450
v) private final consumption expenditure	1100
vi) rent	200
vii) Consumption of fixed capital	115
viii) Government final consumption expenditure	700
ix) Interest	250
x) Mixed income of self-employed	500
xi) Net factor income from abroad	(-)15
xii) Net exports	(-)25

10. In the present scenario when the Industrial growth is low, do you think a cut in Repo rate by the RBI accelerate the pace of industrial growth? Explain.

11. Explain the process of credit creation process by taking a hypothetical numerical example.

12. State whether the followings are stock or flow :

(a) Income of the household

(b) Consumption expenditure of household

13. Why is money received from sale of shares is not included in domestic factor income.

14. Distinguish between real and nominal gross domestic product.

15. Explain the basis of classifying goods into intermediate and final goods. Giving reasons, classify

the following into intermediate and final goods :

(i) Machines purchased by a dealer of machines.

(ii) A car purchased by a household.

16. What is meant by a normal resident? State which of the followings are treated as normal resident of India.

    (i) An American working in the office of WHO located in India.

    (ii) Indian working in U.S.A. embassy located in India.

17. Which of the following is factor income from abroad for an Indian resident and why?

    (a) Interest income received by Indian resident on the bonds of companies operating in USA.

    (b) Remittances by Indians settled abroad to their families in India.

18. Giving reasons, explain how are the following treated in estimating national Income by the income method.

    (a) Interest on a car loan paid by an individual

    (b) Interest on a car loan paid by a Govt. owned company.

    (c) Dividend received by an Indian from his investment in shares of a foreign company.

    (d) Money received by a family in India from relatives working abroad.

    (e) Interest received on loan given to a friend for purchasing a car.

    (f) Dividend received by a foreigner from investment in shares of an Indian Company.

    (g) Money received by a family in India from relatives working abroad.

    (h) Interest received on loan given to a Friend for purchasing a car.

19. Explain the problem of double counting in estimating national income, with the help of an example. Also explain two alternative ways of avoiding the problem.

20. Giving reasons explain wheather the following are included in domestic product of India.

    (i) Profit earned by a branch of foreign bank in India.

    (ii) Payment of salaries to its staff by an embassy located in New Delhi.

    (iii) Interest received by an Indian resident from firms abroad.

21. What is meant by the term money supply?

22. State two primary functions of money.

23. Explain the function of money as 'Unit of value'.

24. What are open market operations? What is their effect on availability of credit?

25. Explain the 'lender of last resort' function of central bank.

Class - XII   **Subject –Accountancy**

ACCOUNTING FOR PARTNERSHIP FIRMS – FUNDAMENTALS

1. In absence of partnership deed, deficiency arising on guaranteed share is met by other partners in which ratio?

2. Interest on Partners' Loan is to be treated as –
   - a) An appropriation out of profits
   - b) A charge against profit
   - b) Both (a) and (b)
   - d) None of the above

3. P and Q are partners in a firm. They are entitled to interest on their capitals but the net profit was not sufficient for this interest. The net profit will be distributed between partners in –
   - a) Agreed Ratio
   - b) Profit Sharing Ratio
   - b) Capital Ratio
   - d) Ratio of Interest on Capital

4. X is a partner who used the stock of the firm worth Rs. 10,000 and suffered a loss of Rs. 2,000. He wants the firm to bear the loss. How much 'x' is liable to pay to the firm?

5. What is the maximum number of partners that a partnership firm can have? Name the act that provides for maximum number of partners in a partnership firm.

6. A partner who has invested more capital in the firm is entitled to get interest on the excess amount of capital. (True/ False)

7. If all the partners agree, a minor may be admitted for the benefit of partnership. (True/False)

8. --------------------------- is an extension of Profit & Loss Account.

9. Under --------------------------------------- System, the balance of capital changes with every transaction of the partner with the firm.

10. Ritesh and Hitesh are childhood friends. Ritesh is a consultant whereas Hitesh is an architect. They contributed equal amounts and purchased a building for Rs.2 crores. After a year, they sold it for Rs.3 crores and shared profits equally. Are they doing business in partnership? Give reason in support of your answer.

11. Kajal, Neerav and Alisha are partners in a firm sharing profits in the ratio of 3 : 2 : 1.They decided to admit Venusan, their landlord as a partner in the firm. Venusan brought sufficient amount of capital and his share of goodwill premium. The accountant of the firm passed the entry of rent paid for the building to Venusan in 'Profit and Loss Appropriation Account'. Is he correct in doing so? Give reason in support of your answer.

12. Differentiate between 'Profit and Loss Appropriation Account' and 'Profit and Loss Suspense Account.'

13 In the absence of deed …………….salary will be given to partners.

14 Partners' Current Accounts are opened when their capital accounts are

      (1) Fixed

      (2) Fixed and Fluctuating both

      (3)Fluctuating

      (4)None of these

15 The interest on capital accounts of partners under the fluctuating capital account method is credited to

      (1) Interest Account
      (2)Profit and Loss Account
      (3)Partners' Capital Accounts
      (4)None of these

16 In the absence of an agreement to the contrary, partners share profits and losses in the

      (1) Ratio of their capitals at the beginning of the year
      (2) Ratio of their capitals at the end of the year
      (3) Ratio of average capital
      (4) Equal ratio

17 Interest on partner's drawing under a fluctuating capital account is debited to
      (1) Partner's Capital Account
      (2) Profit and Loss Account
      (3) Drawing Account
      (4) None of the above

18 In case of limited liability partnership business , maximum number of partners are limited. (True/ False)

19 Partners are mutual …………..of each other in partnership firm/business.

20 If any partner remains absent from business , share of profit will automatically reduce. (True/False)   1

21 Sohan and Mohan are partners sharing profits and losses in the ratio of 2:3 with the capitals of Rs 5,00,000 and Rs 6,00,000 respectively. On 1st Jan 2006 Sohan and Mohan granted loans of Rs. 20,000 and Rs 10,000 respectively to the firm. Show the distribution of profit and losses for the year ended 31st March 2006 if the loss before interest for the year amounted to Rs 2,500.

22. P and Q were partners in a firm sharing profits equally. Their fixed capitals were Rs.1, 00,000 and Rs.50, 000 respectively. The partnership deed provided for interest on capital at the rate of 10% per annum. For the year ended 31st march, 2016 the profits of the firm were distributed without providing interest on Capital.

Pass necessary adjustment entry to rectify the error.

23. Rajeev and Sanjeev were partners in a firm. Their partnership deed provided that the profits shall be divided as follows:

First Rs.20,000 to Rajeev and the balance in the ratio of 4:1. The profits for

The year ended 31st March, 2019 were Rs.60,000 which had been distributed equally among the partners. On 1.4.2018 their capitals were Rajeev Rs.90,000 and Sanjeev Rs.80,000. Interest on capital was to be provided @ 6% p.a. While preparing the profit and loss appropriation A/c interest on capital was omitted.

Pass necessary rectifying entry for same. Show your workings clearly.

24. Mudit and Uday are partners in a firm sharing profits in the ratio 2:3. Their capital accounts as on April 1, 2015 showed balances of Rs.70,000 and Rs.60,000 respectively. The drawings of Mudit and Uday during the year 2015-2016 were Rs.16,000 and Rs.12,000 respectively. Both the amounts were withdrawn on 1st January 2016. It was subsequently found that the following items had been omitted while preparing the final accounts for the year ended 31st March 2016.

(a) Interest on capitals @ 6% p.a.;
(b) Interest on drawings @ 6% p.a.;
(c) Mudit was entitled to a commission of Rs.4,000 for the whole year. Showing you workings clearly, pass a rectifying entry in the books of the firm.

25. On 1st April, 2014 a firm had assets of Rs.1,00,000 excluding stock of Rs. 20,000.Partners' capital accounts showed a balance of Rs. 60,000. The current liabilities were Rs.10,000 and the balance constituted the reserve. If the normal rate of return is 8%, theGoodwill' of the firm is valued at Rs.60,000 at four years of purchase of super profit,find the average profit of the firm.

26. Asha and Aditi are partners in a firm sharing profits and losses in 3:2. They admit Venus as a new partner for 1/4th share in profits. At the time of admission , Goodwill is to be valued at two years' purchase of the average profits of last four years.

The profits of last four years were –

Year	Profits
2013-14	3,50,000
2014-15	4,75,000
2015-16	6,70,000
2016-17	7,45,000

The following additional information is given-

1. To cover management cost an annual charge of Rs.56,250should be made for the purpose of valuation of goodwill.
2. The Closing Stock for the yearended 31.03.17 was overvalued by Rs.15,000.

Calculate Value of Goodwill of Firm at time of Venus's admission.

27. On April l, 2018, a firm had assets of Rs1, 00,000 excluding Stock of Rs 20,000. The current liabilities were Rs10, 000 and the balance constituted

Partners' Capital Accounts. If the normal rate of return is 8%p.a., the Goodwill of the firm is valued at Rs 60,000 at four years purchase of super profit, find the actual profits of the firm.

28. Shreya & Vivek were partners sharing profits in the ratio 3:2. The balances in capital & current accounts of Shreya and Vivek as on 01.04.2017 were Rs.3,00,000 and Rs.2,00,000 and Rs.1,00,000(Cr.) and Rs.28,000(Dr.) respectively.

The partnership deed provided that Shreya was to be paid a salary of Rs.5,000 p.m. and Vivek was to get a commission of Rs.30, 000 p.a. Interest on Capital was to be allowed @ 8% p.a. whereas Interest on Drawings were to be charged @ 6% p.a. The drawings of Shreya were Rs.3, 000 at the beginning of each quarter while Vivek withdrew Rs.30, 000 on 01.09.2017. Net profits before making the above adjustments were Rs.1, 20,000.

Prepare Profit & Loss Appropriation A/c. And Partners Capitals and Current A/cs.

Class - XII   **Subject – Business Studies**

SIGNIFICANCE OF MANAGEMENT

1. At what level of management, managers are responsible for the welfare and survival of the organization.

2. Describe management as a process.

3. Enumerate any two functions of middle level management.

4. Volvo Ltd's target is to produce 10,000 shirts per month at a cost of Rs. 100 per shirt. The production manager achieved this target at a cost of Rs. 90 per shirt. Do you think the "production manager' is effective? Give one reason in support of your answer.

5. "Management is skillful and personal application of existing knowledge to achieve desired results". Explain.

6. Is management a full fledged profession? Give any three reasons in support of your answer.

7. Dheeraj is working as "Operations Manager" in Tifco Ltd. Name the managerial level at which he is working. State any four function he will perform as 'Operations Manager' in this company.

8. Coordination is synchronization of group efforts to achieve organizational objectives'. In the light of this statement, highlight any five features of co-ordination.

9. Give the meaning of management and explain how it 'creates a dynamic organization' and helps in the development of society.

10. XYZ Power Ltd. set up a factory for manufacturing solar lanterns in a remote village as there was no reliable supply of electricity in rural areas. The revenue earned by the company was sufficient day by day, so the company decided to increase production to generate higher sales. For they decided to employ people from the nearby villages as very few job opportunities were available in that area. The company also decided to open schools and crèches for the children of its employees.

    1. Identify and explain the objectives of management discussed above.
    2. State any two values which the company wanted to communicate to the society. Principles of Management
    3. The management of a company promises the workers to pay extra wages if they work overtime, but later on management refuses to pay extra wages. Which principle is violated in this case?

11. 'A manager should replace 'I' with 'we' in all his conversation to encourage team spirit'. Identify the principle of management emphasized here.

12. Taylor overlooks the principle of equity derived byFayol?

13. On which principle of Fayol, Taylor's technique of functional foremanship is based?

14. Give any one reason why principles of management are called contingent?

15. Name and explain the principle of scientific management which emphasizes on study and analysis of methods rather than estimation.

16. Explain that technique of scientific management which is the strongest motivator for a worker to reach standard performance.

17. State any four features of 'principles of management'.

18. With the help of a diagram explain 'functional foremanship' as a technique of scientific management.

19. "Aapka Vidyalaya" believes in holistic development of students and encourages team building though a mix of curricular, co-curricular and sports activities. On its founders day a stage performance had to be put up. A committee of ten perfects was constituted to plan different aspects of the function. They all decided to use recycled paper for decoration. There was a spirit unity and harmony and all members supported each other. With mutual trust and the prorgramme was systematically planned and executed. Kartik, one of the perfects that unknowingly the group had applied one of the principle of management while planning and executing the programme. He was so inspired by the success of the function that he asked his father to apply the same principle in his business. His father replied that he was already using this principle.

   1. Identify the principle of management applied for the success of the programme.
   2. State any two features of management highlighted in the above para.
   3. Identify any two values which 'Aapka Vidyalaya' communicated to the society.

BUSINESS ENVIRONMENT

1. List the major impacts of new industrial policy.

2. Define Business Environment.

3. The project of Nano Car re-established in Gujarat is indicated by which function of environment?

4. The Prime Minister reduced the repo rate to overcome recession. This is related to which dimension of business environment?

5. Banking sector reform have led to easier credit terms and better services. This is an example of one of the key components of business environment. Name it and explain in brief.

6. Explain by giving any 4 points, why in the present day, competitive market it is essential for business to remain alert and aware of its environment

7. explain the impacts of government policy changes business and industry in India
   the court passed an order that all schools must have water purifier for the schoolchildren As

   a) Society in general is more concerned about quality of life.

   b) Innovative techniques are being developed to manufacture water purifier for the school children

   c) Incomes arc rising and children also drinking purified water. The government is also showing positive attitude towards the water purifier business.

8. Identify the different dimensions of business environment by quoting from the above details.

9. After winning the election, Prime Minister Mr. Narendra Modi launched a campaign of "Swachh Bharat" and invited various celebrities to be a part of this Abhiyan. This spread awareness among the people in society and in general people started becoming more careful and aware about the cleanliness around their area. To continue its impact, a new service tax for Swachh Bharat was also started. The government is planning to import new and better technology to adopt new methods of treating the garbage and waste. State the various dimension of business environment mentioned in the above para quoting the lines.

10. Explain any five negative impacts of liberalization and globalization on business and industry in India.

11. Explain any five positive effects of liberalization and globalization on business and industry in India.

12. Identify the type of dimension of business environment to the following are related:

    a) Banks reduce the interest rate on housing loans.
    b) No. of working women are increasing.
    c) Reservation of tickets by internet.
    d) Prohibition of Alcohol beverages to be advertised.
    e) Winning of Ram Admi Party has built up confidence in economically weaker section people.

MARKETING MANAGEMENT

1. What do you mean by product mix?

2. What is meant by 'Production concept' of marketing?

3. Explain any three advantages of branding.

4. Differentiate between marketing and selling.

5. Explain the functions of labelling.

6. Differentiate between Advertisement and Personal selling.

7. What do you mean by Trade Mark?

8. "Packaging has acquired great significance in the marketing of goods". In the light of this statement explain any three functions of packaging.

9. Identify and explain the levels of packaging- Give a suitable example

10. What are the advantages of Registering a Trade Mark?

11. Explain the concept of Personal Selling and also explain the qualities of good salesman.

12. Explain the levels of channels of distributions.

13. No doubt pricing of the product is the key aspect of marketing management which depends upon

    various factors. Explain any four factors of pricing briefly.

14. Explain the role of public relations.

15. Define Marketing Management.

16. What do you mean by publicity?

17. Explain the following functions of marketing
    a) Gathering and analyzing the market information.
    b) Standardization and grading.
    c) Market Planning

18. Nisha, a school has manufacturer decided to improve the product for profit thus added a water bottle bolder to the existing design.
    a) Identify the marketing management philosophy adopted by Nisha
    b) Explain the same.

Class - XII   **Subject – Entrepreneurship**

1. Explain the PESTEL Model briefly and give suitable examples.
2. Define Partnership. Explain the characteristics of the same.
3. Srijan wanted to start a business of electronic products but did not have sufficient funds for this. One of his friends suggested him to approach Suman who was running a Financing Company. Suman asked him to prepare a slide show and give oral narrative that is meant to trigger discussion and create interest in potential investors while reading the written presentation. Identify and explain the ' format of business plan' discussed
4. Saket is a budding rural entrepreneur who is working on improving the health index of the women in rural areas. Saket needs to understand various health issues confronted by women in order to create a socially committed organisation. For this, he wants to gather information about the target market or customers in an organized manner. Name the organized effort of Saket and explain the same.
5. Neeru who has done LLB from a renowned Law college wanted to open her own legal consultancy firm with her friend who has completed LLM recently. Neeru discussed the different information of the business plan with her friend stating the authority and responsibility of each member, management team, salary to be given, dress code etc. Identify the type of business plan Mentioned above and explain the same.
6. " For a viable venture to be born, an entrepreneur is required to apply his knowledge, skill, competencies and creativity strategically to market." Identify and explain the requirement to be complied with by these factors for successful processing of an Idea into opportunity.
7. Pratima was working with Harish, a new entrepreneur, as a production manager. To achieve the objective he issues necessary orders and guidelines to his subordinates pertaining to work and they give practical shape to the production plan.
   Identify and explain the element being discussed above which is related to one of the components of a Business Plan.
8. A three minute summary of the Business Plan's Executive summary, often used to awaken the interest of potential funders, customers or strategic partners is known as _____
   (a) An Internal operational plan   (b) A Written presentation
   (c)Elevator Pitch   (d) None of these
9. Vipul 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' for himself to start the venture. Identify the term used for 'road map' by Vipul, from the following.
   (a) Business Strategy   (b) Business Plan
   (c)Business Policy   (d) None of these
10. Marketing plan needs to consider the strengths and weaknesses of a new venture to ensure its success. So it is important for the Entrepreneur to conduct SWOT Analysis. Identify what does
    'T' stand for, from the following.
    (a) Trend   (b) Technique
    (c)Threat   (d) None of these
11. 'Tata' manufactured a motor car 'NANO 'for common man which is very low in price. Name and explain the behavioural characteristic that develops the idea of 'TATA' into available and successful project.

12. Differentiate between Private limited company and Public Limited company. [Any six points]
13. What do you mean by idea fields? Explain various idea fields.
14. Explain the elements in Innovation process.
15. Describe briefly the ways in which an entrepreneur spots trends.

Class - XII   **Subject – History**

1. Discuss the relationship of states with bhakti sufi saints

2. Explain the features of Islamic religion which contributed to its spread through the sub continent.

3. Explain sufi silsila

4. Describe the beliefs of Virashiva tradition of Karnataka

5. Compare and contrast the traditions of Nayanars and Alwars of Ancient Tamilakam

6. Write a short note about Mira bai

7. Explain the teachings of Kabir

8. Explain the teachings of Guru Nanak

9. What were the specialists in ancient plant remains called?

10. Explain the term 'proto-shiva'

11. Name two ways through which archeologists trace social differences

12. From which Harappan site the human torso known as the priest king retrieved?

13. Which settlementwas almost exclusively devoted to craft production

14. "The people of Indus valley civilisation were much concerned for maintaining their privacy " Give any three points to confirm this view point.

15. Why do historians and archaeologists find Harappan scripts enigmatic? Explain.

16. What is the role of John Marshall in the context of harappan civilisation

17. How do archeologists trace socio -economics differences in Harappan society What are differnces that they notice

18. The problems of archaeological interpretation are perhaps most evident in attempts to reconstruct religious practices. Elucidate.

19. Describe some of the distinctive features of Mohenjodaro.

20. Who deciphered Kharostiand Brahmi script? What important facts were revealed through these scripts?

21. King Asoka was also known as ?

22. Explain briefly notions of kingship during Kushana and Gupta Empire.

23. Explain the sources used by historians to reconstruct the history of the Guptaperiod

24. Explain how exchanges were facilitated by the introduction of coinage.

25. Write a short note on Prabhavati Gupta.

26. Explain the sources used by historians to reconstruct the history of the Maurya period.

27. What does the Asokan inscriptions tell about the Mauryas? Describe the limitations of the inscriptional evidences

28. Why was the Mauryan empire regarded as a major landmark in the early Indian history?

29. Which sanskrit term is used for 'Lineage'?

30. Explain the term Gotra

31.Which is the earliest Uoanishads?

32.What does the term *Nishada*means?

33. Who is supposed to have written mahabharata?

34. Which chinesetraveller gave an account of the life of the Scavengers?

35.Explain how you will prove that the text of Mahabharata was a dynamic one?

36. Critically examine the duties as laid down in Manusmriti for Chandalas.

37.Discuss whether the mahabharata could have been the work of a single author

38. Explain the rules of marriage.

39. With reference to the Mahabharata, explain what role did gender play in the accession to property.

40.Describe the economic and social conditions of the people living in rural areas from c.600 BCE to 600 CE.

Class - XII   **Subject –** POLITICAL SCIENCE

BOOK-1

CHAPTER NO. 1 COLD WAR

1. Explain the concept of mutually assured destruction (MAD) and discuss
   how valid it was as a strategy to prevent war?

2. Discuss the role of NPT. Why did India not sign it?

3. What is Arena of Cold War? Name two.

4. Define the following: a. Communism, b.Détente, c.Truman Doctrine. d.
   Domino effect e. Molotov Plan f.Capitalism

5. Did the West‖ win ―the cold war? Give reasons for your answer.

6. The Cold war was a complex relationship combining elements of both
   conflict and stability? Elaborate.

7. Who was the USSR President who decided to turn Cuba into a base?

8. What was the logic of deterrence? What was its relevance?

9. What was the Marshall plans intention?

10. Discuss the role of the NIEO. Why was it set up?

11. Why were military satellites important to the superpowers?

12. Sometimes it is said that ―the Cold War was the simple struggle for powers and that
    ideology had nothing to do with it. It never became a hot war.Give reasons to
    support your answer

13. Inspite of the intense rivalry the cold war never became a hot war. Comment.

14. What do you think of the statement that NAM has become irrelevant today?

DELHI PUBLIC SCHOOL

SAIL TOWNSHIP, RANCHI
SUMMER ASSIGNMENT (2022-23)

Class - XII   **Subject – Sociology**

1. What is Formal demography?

2. Why is Rising dependency ratio a cause of worry in many country?

3. State the importance of demographic data.

4. Define Caste.

5. What do you mean by Tribal community?

6. What are the permanent Traits of the Tribes?

7. What is the meaning of social resources?

8. What is the significance of the term Dalit?

9. Who are called OBC'S?

10. Who are the social minorities in the social term?

11. What is communalism?

12. What does the term Cultural diversity mean?

SHORT ANSWER TYPE:

1. Give reasons for the declining sex ratio.

2. What reasons are responsible for more maternal deaths in India than any other country in the world? What efforts are being done by the Indian health ministry to overcome this issue?

3. What is meant by 'Birth rate' and 'Death rate'? Explain why the birth rate is relatively slow to fall while the death rate declines much faster?

4. In what ways does the change in social structure lead to changes in the family structure?

5. What is caste? How caste is different from Varna?

6. Highlight the problems faced by the tribals in India?

7. Discuss Casteism in India.

8. How is social inequality different from the inequality of individual?

9. What are some of the features of social stratification?

10. What is Untouchability?

11. What are policies of assimilation and policies of integration?

12. What are community identities? Why are they important?

13. What forces and factors threaten the unity of India today?

LONG ANSWER TYPE:

1.How does the changing age structure offer a 'demographic dividend' for India?

2. Explain theory of Demography Transition.

3. Analyse the success and failure of the family planning programme during Emergency.

4. What role did caste Progressive reforms play during freedom struggle?

5. Discuss the tribal identity emerged today?

6. How do you explain this juxtaposition of two caste groups a seemingly casteless upper caste group and an apparently caste defined lower caste group?

7. In what sense can one say that 'disability' is as much a social as a physical thing ?

8. What are the major issues taken up by the Women's movement over its history?

9. Forced incorporation of tribal community into the mainstream processes has had its impact on tribal culture and society as much as its economy. Discuss.

10. Discuss the caste based movement in India(Dalit Movement)

Class - XII   **Subject –Legal Studies**

Unit 1. Judiciary

1. Discuss the scope of Judicial Review with respect to the basic structure of the Constitution of India.

2. How does Judicial Review ensure separation of powers between the three organs of the govt. and between the centre and state.

3. How are independence and impartiality of judges two different concepts?

4. Discuss the provisions related to judges which ensure independence of Judiciary.

5. What are the different roles that the Supreme Court of India performs?

6. How does independence of Judiciary work as a Constitutional Safeguard?

7. How can the judges of Supreme Court and the High Courts be removed?

8. Discuss the structure and hierarchy of courts in India.

9. What are Tribunals? What is the aim of creating tribunals? Give some examples of tribunals in India and why they were created.

10. India has a common law jurisdiction. Explain, giving the main features of a common law system as opposed to a civil law system.

Class - XII   **Subject – Physical Education**

1. Write any two disadvantages of knock-out tournament?
2. Explain the types of League tournament?
3. Write short notes on:
   a. Ceremonial committee
   b. Finance committee
4. Draw the flowchart of various committees?
5. Draw the knock-out fixture when the number of teams is 12.
6. Draw the league fixture by using cyclic method when the number of teams is 6.
7. Write short notes on:
   a. Balanced diet
   b. Macro nutrients
   c. Micro nutrients
8. Explain fat soluble vitamins?
9. Explain nutritive components of diet?
10. What are the methods to control healthy body weight?
11. What is food intolerance? What are the causes of food intolerance?
12. Draw the flow chart of common postural deformities?
13. Write the corrective measures of Scoliosis?
14. Write short notes on:
    a. Osteoporosis
    b. Amenorrhea
    c. Eating disorder
    d. Menstrual dysfunction
    e. Menarche
15. What is spinal curvature deformity?

DELHI PUBLIC SCHOOL, RANCHI

Fine Art Painting Theory and Practical Assignment for Summer Holiday 2022-23- of Class XII

Theory Assignment - Class XII Fine Art (Comparative Study)	**Rajasthani & Pahari Paintings**

| Name: | | Class / Sec.: | | Roll No.: |

Name of Painting	School	Sub-school	Patron	Period	Artist	Medium	Theme / Subject	Moral Value	Main Features	Features of Female figure and face	Features of Male figure and face
Maru-Ragini											
Chaugan Players											
Krishna on swing											
Radha (Bani-Thani)											
Bharat Meets Rama at Chitrakut											
Krishna with Gopis											
Nand Yashoda and Krishna with Kinsmen going to Vrindavana											

DELHI PUBLIC SCHOOL, RANCHI

Fine Art Practical Assignment for Summer Holiday 2022-23- Class XII
SUBJECT – Fine Art Painting (049)

Painting (049)

1. Make 2 **Colourful composition**

with human figure, daily life, village life, urban life, drawing room, rainy day, festival, market, city life, games & sports, fantasy & dream, cultural & social events, bird and animal, nature on 1/4th good quality chart paper (cartridge paper)

2. Make 1 **Pencil shading** Still-life of few objects available at home on 1/4th good quality chart paper (cartridge paper)

3. Make 1 **composition of any Indian Folk/ Traditional Art** on 1/4th good quality chart paper (cartridge paper)

Submit all just after Summer holiday

According to practical work, write your experience…

How you respect, appreciate and demonstrate the artistic expression which you did in different forms and styles and try to explore the different medium. Apply theoretical knowledge in practical contexts. Be resourceful and organize information effectively…

DELHI PUBLIC SCHOOL, RANCHI

Fine Art Graphics Theory and Practical Assignment for Summer Holiday 2022-23- of Class XII

Theory Assignment - Class XII Fine Art (Comparative Study)　　　**Rajasthani & Pahari Paintings**

Name:　　　　　　　　　　　　　　　　Class / Sec.:　　　　　　　　Roll No.:

Name of Painting	School	Sub-school	Patron	Period	Artist	Medium	Theme / Subject	Moral Value	Main Features	Features of Female figure and face	Features of Male figure and face
Maru-Ragini											
Chaugan Players											
Krishna on swing											
Radha (Bani-Thani)											
Bharat Meets Rama at Chitrakut											
Krishna with Gopis											
Nand Yashoda and Krishna with Kinsmen going to Vrindavana											

DELHI PUBLIC SCHOOL, RANCHI

Fine Art Practical Assignment for Summer Holiday 2022-23- Class XII

Graphics (050)

 Make 5 **black & white compositions, using different dots, lines and textures,**
with human figure, daily life, village life, urban life, drawing room, rainy day, festival, market, city life, games & sports, fantasy & dream, cultural & social events, bird and animal, nature, Indian folk/ traditional art **on ¼ᵗʰ Chart Papers**
by Poster Colour / Fabric colour / Acrylic colour / Water colour
which you can easily transfer on Silk screen for Serigraphy.
You can take idea from internet also but don't copy it….

Submit all just after Summer holiday

According to practical work, write your experience…

How you respect, appreciate and demonstrate the artistic expression which you did in different forms and styles and try to explore the different medium. Apply theoretical knowledge in practical contexts. Be resourceful and organize information effectively…

Class - XII   **Subject – Hindustani Music Vocal**

1. निम्नलिखित को परिभाषित कीजिए

    अलंकार, मींड, गमक

2. आलाप और तान में अंतर स्पष्ट कीजिए।

3. राग भैरव का सम्पूर्ण परिचय लिखिए।

4. झपताल का सम्पूर्ण परिचय लिखिए।

5. राग भैरव के स्वरों में दो अलंकार बनाए।

6. स्वर संयोग से समय निर्धारण के बारे में व्याख्या करें।

7. रूपक ताल का विवरण और एक आवर्तन में दुगुन को लिपिबद्ध कीजिए

8. राग भैरव में दो तानें लिखे।

9. झपताल में ठाह, दुगुन को ताल लिपिबद्ध कीजिए।

10. राग भैरव में द्रुत ख्याल गाने का अभ्यास करें।

11. मध्यम के प्रयोग से रागों का समय निर्धारण को समझाइए।

12.ग म धऽ धऽ प ,ग म रे ऽरे ऽसा इन स्वर समुदाय से राग पहचान कर द्रुत ख्याल की स्वरलिपि लिखिए।

Class - XII   **Subject –Odissi Dance**

01. **Write the briefly about three style of Chhau dance:**
   (a) Mayurbhanjchhau,
   (b) Puruliachhau and
   (c) Seraikellachhau
   (d) **In "MayurbhanjChau", "PuruliaChau" and "SeraikllaChau"**, which style employs jumps and spinning movements in the air?
   (e) Which "Chhau" style does not use masks?
   (f) Write the names of the states from where different styles of 'Chhau' dance originated.
   (g) **Name the authors of the following texts:** (a) NatyaShastra (b) AbhinayaDarpana(c) AbhinayaChandrika

02. **From the following four Odissi gurus, who were the senior mostgurus?** Guru Deba Prasad Das, Guru PankajCharan Das, Guru MayadharRaut and Guru KelucharanMahapatra

   (a) Give his date of birth.
   (b) Name the theatre he joined as a guru.
   (c) Did he belong to a 'Gotipua' or a 'Mahari' family ?
   (d) Which institute of Music, Dance and Drama in Bhubaneshwar did he join?
   (e)Name the three Gurus who contributed in the development of Odissi dance.
   (f) Name the author of 'AbhinayaChandrika'. Give its date.
   (g) Name the four kinds of 'Abhinaya'andbriefly explain each one.
   (h) What is the NatyaShastra, Why is it important?
   (i) Who wrote the NatyaShastra and when?
   (j) What is AbhinayaDarpana?
   (k) Who wrote abhinayaDarpana and when?
   (l) How many chapters in NatyaShastra?

03. **Detail knowledge of different books on dance like –** AbhinayaDarpan, NatyaShastra, and AbhinayaChandrika.

04. Write the life history of Padmavibhushan Guru KelucharanMohapatra.Padmashree Guru pankajCharan Das and Guru Deba Prasad Das.

05. Define the termPallavi in Odissi dance.

06. Define the term:a) Nritta, b) nritya, c) Natya

07. Write short note on Matra, Lay, Tala, Avartana and Vibhaga (Anga)

08. Define Tandava and Lasya.

09. What is the difference between Natyadharmi and Lokdharmi.

10. **State whether the following are True or False:**

   (a) 'Maharis' are male dancers.

   (b) 'Gotipuas' are permitted to dance inside the temples.

   (c) 'Ginni' is another name for Manjira.

   (d) Guru PankajCharan Das was the guru of Guru Debaprasad Das, Guru KelucharanMahapatra and Guru MayadharRaut.

   (e) Salutation to the Earth is called 'TrikhandiPranam' in Odissi dance.

11. **Complete the following sentences:**

   (a) The vigorous element in Indian classical dance is known as ____ and ___.

   (b) Spins or whirling movements in Odissi dance are known as_____.

   (c) The basic poses in Odissi dance are known as _____.

   (d) Women who sing inside the temples are known as _____.

   (e) Rhythmic syllables played on the Mardala are known as _____,__,____.

   (f) The earliest mention of Odissi dance is in the _____and ____.

   (g) Moving on the heels in Odissidance is known as _____.

   (h) In dance jumps are known as _____.

   (i) The posture with three bends in the body is called _____.

   (j) The invocation in Odissi dance is called _____.

   (h) _____is the local name of devadasi.