



THE S D VIDYA SCHOOL, NOIDA

SUMMER HOLIDAY HOMEWORK (2024-25)

CLASS – XII A

Dear students,

“Self-belief and hard work will always earn you success.”

Holidays provide a much-needed respite from the daily routine and academic pressure. It allows you to unwind, spend quality time with family and friends, and engage in activities you love. Balancing holidays and studies is a crucial aspect of a student's life. While they are meant for relaxation and enjoyment, it is equally important to maintain a certain level of focus on studies during these breaks. By setting realistic goals and creating a conducive study environment, you can effectively utilize holidays to consolidate knowledge, enhance skills, and stay academically on track. Moreover, incorporating breaks and leisure activities into your study routine can help to maintain focus, reduce stress, and make study sessions more productive. Ultimately, by finding the right balance between holidays and studies you can enjoy the break while also making progress in your academic journey.

KEEP IN MIND TO:

- Pray to the Almighty daily and thank Him for the blissful life that you enjoy.
- Give prime importance to your health.
- Set and maintain a routine at home. Be a good time manager.
- Practice positive thinking and be grateful for what we have.
- Relax, listen to music, or read books.
- Be a helping hand to your parents and learn the skill of shared responsibility.

MOST IMPORTANT:

- Make sure that all the syllabus done by May is revised thoroughly.
- Complete the assignments.

REMEMBER:

“THE FUTURE BELONGS TO THE COMPETENT. GET GOOD, GET BETTER, BE THE BEST!”

Wishing all the students a joyful learning and happy holidays.

ENGLISH

PROJECT-

TITLE: CRITICAL APPRECIATION-MY MOTHER AT SIXTY SIX (BY KAMALA DAS)

Make a Project File defining and illustrating the critical appreciation of the poem 'My Mother at Sixty six' by 'Kamala Das' (Flamingo). The project must include the following in the same sequence-

1. Title of the project
2. Certificate
3. Acknowledgement
4. Index
5. Introduction to the topic
6. Analysis on the poem's theme/s and literary devices
7. Summary of the poem
8. A short interview of your mother (also paste/sketch a picture of yours with your mother) asking her questions regarding the days gone by for e.g. her childhood years, her school/college days, her friends and time spent with them, fond memories with her parents, her thoughts on time moving fast, her childhood and present fears, the way she handles her sorrows etc. (Frame proper questions with the given examples). You may include any other relevant questions.
9. Conclusion and reflection on the significance of the poem
10. Bibliography / References

Note:

- ❖ You may display your creative vigour.
- ❖ Cover the file with a black sheet.
- ❖ The file's cover must have the title of the project written on it.
- ❖ You may use a file of your choice with A4 size sheets.
- ❖ The first page of the file must have the name, class, section, roll number of the student along with the title.

ASSIGNMENT-

(CREATIVE WRITING SKILLS)

(To be done in Writing Skills Register)

1. You are Anand Bakshi, a social worker. You want to organise a cleanliness campaign in your locality. Write a notice in not more than 50 words to be displayed at suitable places in the locality inviting the citizens to participate in the campaign. Give details.

2. You are the Student Head, Cultural Affairs, at M.K. Sr. Sec. School. Your school is organising a 2-day Yoga camp over the weekend, for parents of the school students. Draft a card invitation, inviting the school parents for this Yoga camp. Share information about the camp organisers and include other necessary details.

3. You are Varun/Veena of 23, Ramesh Nagar, New Delhi. You want to invite your friends for a party to celebrate your brother's/sister's good board result and admission to a prestigious college. Draft an invitation with the necessary details.

PHYSICS

- (a) **Make an investigatory project on any topic of your choice as per the guidelines of CBSE.**
- (b) **Complete the given assignment in your notebook.**

Choose the correct option-

- 1) The opposition offered by the electrolyte of the cell to the flow of current through itself is known as ____.
 - (a) External resistance
 - (b) Internal resistance
 - (c) Non-resistance
 - (d) None of these options

- 2) In the series combination of two or more than two resistances
 - (a) the current through each resistance is same.
 - (b) the voltage through each resistance is same.
 - (c) neither current nor voltage through each resistance is same.
 - (d) both current and voltage through each resistance are same

- 3) Drift velocity of a free electron inside a conductor is:
 - (a) the thermal speed of the free electron
 - (b) the average speed required by the electron in any direction
 - (c) the speed with which a free electron emerges out of the conductor
 - (d) the average speed of the electron between successive collisions in the direct opposition to opposite to the applied electric field.

- 4) The example of a non-ohmic resistance is:
 - (a) copper wire
 - (b) filament lamp
 - (c) carbon resistor
 - (d) diode

- 5) What happens to the force acting between the charged particles, if the distance between these charged particles is halved?
 - (a) It increases by four times
 - (b) It gets doubled
 - (c) It becomes half
 - (d) It reduces by one-fourth

- 6) The capacity of parallel plate condenser is dependent on the
 - (a) The separation between the plates
 - (b) The metal used for the construction
 - (c) The thickness of the plate
 - (d) The potential applied across the plates

- 7) What does an electric dipole experience when it is kept in the non-uniform electric field?
 - (a) Only a force
 - (b) Only torque
 - (c) Force and torque both
 - (d) Neither force nor torque

- 8) The capacitance of the capacitor is independent of
- (a) The charges present on the plate
 - (b) The distance of separation between the plates
 - (c) The shape of the plates
 - (d) The size of the plates
- 9) What is the electric field in the cavity of a hollow charged conductor?
- (a) Positive
 - (b) Negative
 - (c) Zero
 - (d) Depends on the nature of the conductor
- 10) The electrostatic potential on the perpendicular bisector due to an electric dipole is _____.
- (a) Zero
 - (b) 1
 - (c) Infinite
 - (d) Negative

ANSWER THE FOLLOWING QUESTIONS-

- 1) Define the term 'drift velocity' of electrons in a current carrying conductor. Obtain the relationship between the current density and the drift velocity of electrons.
- 2) Plot a graph showing the variation of resistivity of a conductor with temperature.
- 3) Derive the expression for capacitance of parallel plate capacitor when dielectric slab is between the plates.
- 4) Derive an expression for the potential energy of an electric dipole of dipole moment \vec{p} in the electric field \vec{E}
- 5) A parallel plate capacitor is charged by a battery. After some time the battery is disconnected and a dielectric slab of dielectric constant K is inserted between the plates. How would
 - (a) the capacitance,
 - (b) the electric field between the plates and
 - (c) the energy stored in the capacitor, be affected? Justify your answer.

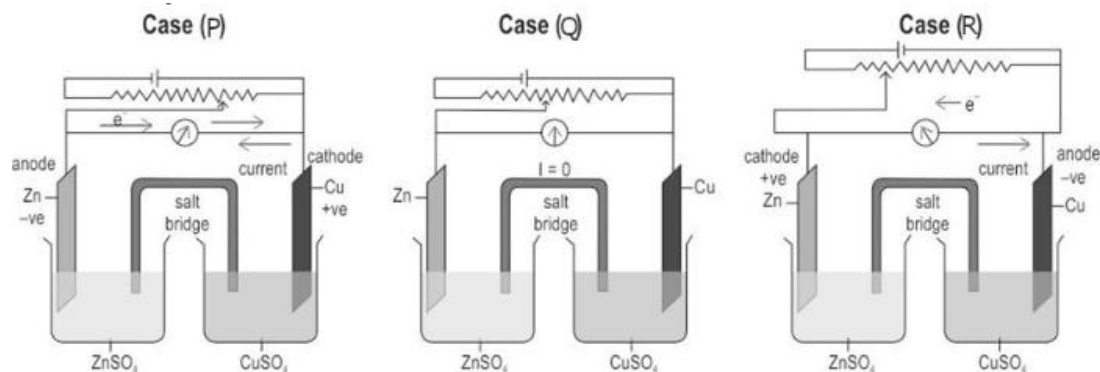
CHEMISTRY

(a) Make an investigatory project on any topic of your choice as per the guidelines of CBSE.

(b) Complete the given assignment in the note book.

Choose the correct answer:

- 1 Sunita set up three cells as shown below: She applied external potential in all the three cells. The potential is increased slowly, till the opposing voltage reaches the value of 1.1 V. Which of the following statements is INCORRECT?



- (a) Electrons flow from Zn rod to Cu rod hence current flows from Cu to Zn in case (P).
 (b) The chemical reaction takes place in case (Q) till the opposing voltage reaches 1.1 V.
 (c) Zinc is deposited at the zinc electrode and copper dissolves at copper electrode in case (P).
 (d) Electrons flow from Cu to Zn and current flows from Zn to Cu in case (R).
- 2 The table given below shows the results of three experiments on the rate of the reaction between compounds P and Q at a constant temperature.

Experiment	The initial concentration of P (mol dm^{-3})	The initial concentration of Q (mol dm^{-3})	Initial rate ($\text{mol dm}^{-3} \text{s}^{-1}$)
1	0.1	0.2	1.10×10^{-4}
2	0.3	0.2	9.91×10^{-4}
3	0.3	0.1	4.96×10^{-4}

Based on the data, what will be the rate equation for the reaction between P and Q?

- (a) $k[\text{P}]^2[\text{Q}]$
 (b) $k[\text{P}][\text{Q}]^2$
 (c) $k[\text{P}][\text{Q}]$
 (d) $k[\text{P}]$
- 3 How many grams of cobalt metal will be deposited when a solution of cobalt (II) chloride is electrolyzed with a current of 10 amperes for 109 minutes? (1 Faraday = 96,500 C; Atomic mass of Co = 59 u)
- (a) 4.0

- (b) 20.0
(c) 40.0
(d) 0.66
- 4 When CuSO_4 is electrolysed using platinum electrodes,
(a) copper is liberated at cathode, sulphur at anode
(b) copper is liberated at cathode, oxygen at anode
(c) sulphur is liberated at cathode, oxygen at anode
(d) oxygen is liberated at cathode, copper at anode.
- 5 A device that converts energy of combustion of fuels like hydrogen and methane, directly into electrical energy is known as
(a) dynamo
(b) Ni-Cd cell
(c) fuel cell
(d) electrolytic cell.
- 6 For reducing one mole of $\text{Cr}_2\text{O}_7^{2-}$ to Cr^{3+} the charge required is :
(a) 3×96500 coulomb
(b) 6×96500 coulomb
(c) 0.3 Faradays
(d) 0.6 Faradays
- 7 For a reaction $\text{A} + \text{B} \longrightarrow \text{C}$, the rate law is given by $r = k[\text{A}]^{1/2}[\text{B}]^2$ the order of reaction is:
(a) 0
(b) $5/2$
(c) 2
(d) $3/2$
- 8 The order of reaction for, $r = k[\text{A}][\text{B}]$ is
(a) 1
(b) 0
(c) 2
(d) 3
- 9 What is the molecularity of reaction for the following elementary reaction:
 $2\text{A} + \text{B} \longrightarrow \text{C}$
(a) 1
(b) 2
(c) 3
(d) 0
- 10 What is the unit of K if rate $= k[\text{A}]^2[\text{B}]$
(a) s^{-1}
(b) mol L^{-1}
(c) $\text{mol}^{-2}\text{L}^2\text{s}^{-1}$
(d) $\text{mol}^1\text{Ls}^{-1}$
- Answer the following questions:
- 11 Write the Nernst equation for the following cell reaction:
 $\text{Zn (s)} + \text{Cu}^{2+} (\text{aq}) \longrightarrow \text{Zn}^{2+} (\text{aq}) + \text{Cu (s)}$
How will the E cell be affected when concentration of
(i) Cu^{2+} ions is increased and
(ii) Zn^{2+} ions is increased?
- 12 The standard Gibbs energy for the following cell reaction is -300 kJ mol^{-1} :
 $\text{Zn (s)} + 2\text{Ag}^+ (\text{aq}) \longrightarrow \text{Zn}^{2+} (\text{aq}) + 2\text{Ag (s)}$
Calculate E° cell for the reaction. (Given: $1\text{F} = 96500 \text{ mol}^{-1}$)

- 13 Calculate Λ°_m for MgCl_2 if Λ°_m values for Mg^{2+} ion and Cl^- ion are $106 \text{ S cm}^2 \text{ mol}^{-1}$ and $76.3 \text{ S cm}^2 \text{ mol}^{-1}$ respectively.
- 14 Out of the following pairs, predict with reason which pair will allow greater conduction of electricity :
- (i) Silver wire at 30°C or silver wire at 60°C
(ii) $0.1 \text{ M CH}_3\text{COOH}$ solution or $1 \text{ M CH}_3\text{COOH}$ solution.
(iii) KCl solution at 20°C or KCl solution at 50°C .
- 15 Give two points of differences between electrochemical and electrolytic cells.
- 16 When a steady current of 2A was passed through two electrolytic cells A and B containing electrolytes ZnSO_4 and CuSO_4 connected in series, 2 g of Cu were deposited at the cathode of cell B. How long did the current flow? What mass of Zn was deposited at cathode of cell A ?
[Atomic mass : $\text{Cu} = 63.5 \text{ g mol}^{-1}$, $\text{Zn} = 65 \text{ g mol}^{-1}$; $1\text{F} = 96500 \text{ C mol}^{-1}$]
- 17 The electrical resistance of a column of 0.05 M KOH solution of length 50 cm and area of cross-section 0.625 cm^2 is $5 \times 10^3 \text{ ohm}$. Calculate its resistivity, conductivity and molar conductivity
- 18 Predict the products of electrolysis of an aqueous solution of CuCl_2 with platinum electrodes.
(Given : $E^{\circ}_{\text{Cu}^{2+}/\text{Cu}} = +0.34 \text{ V}$, $E^{\circ}_{(\frac{1}{2} \text{Cl}_2/\text{Cl}^-)} = +1.36 \text{ V}$
 $E^{\circ}_{\text{H}^+/\text{H}_2(\text{g}), \text{Pt}} = 0.00 \text{ V}$, $E^{\circ}_{(\frac{1}{2} \text{O}_2/\text{H}_2\text{O})} = +1.23 \text{ V}$)
- 19 Calculate E cell of the following :
 $\text{Zn(s)}/\text{Zn}^{2+} (0.1 \text{ M}) \parallel (0.01 \text{ M}) \text{Ag}^+/\text{Ag(s)}$
Given : $E^{\circ}_{\text{Zn}^{2+}/\text{Zn}} = -0.76 \text{ V}$, $E^{\circ}_{\text{Ag}^+/\text{Ag}} = +0.80 \text{ V}$
[Given: $\log 10 = 1$]
- 20 X and Y are two electrolytes. On dilution molar conductivity of 'X' increases 2.5 times while that Y increases 25 times. Which of the two is a weak electrolyte and why?

MATHEMATICS

- (a) Prepare power point presentation on trigonometry
(b) Complete the given assignment in the note book.

ASSIGNMENT -1

- What are the possible orders for a matrix having 53 elements?
- Construct a 2×2 matrix, where:
 - $a_{ij} = (i-2j)^2 / 2$
 - $a_{ij} = |-2i+3j|$
- Find the value of x if
$$\begin{vmatrix} 2 & 4 \\ 5 & 1 \end{vmatrix} = \begin{vmatrix} 2x & 4 \\ 6 & x \end{vmatrix}$$
- Determine the value of k, if the area of triangle is 4 units. The vertices are (k,0), (4,0), (0,2).
- If A is an invertible matrix of order 2, then $\det(A^{-1})$ is equal to:
 - $\det(A)$
 - $1/\det(A)$
 - 1
 - 0
- Given $3 \begin{bmatrix} x & y \\ z & w \end{bmatrix} = \begin{bmatrix} x & 6 \\ -1 & 2w \end{bmatrix} + \begin{bmatrix} 4 & x+y \\ z+w & 3 \end{bmatrix}$, determine the values of x,y,z,w.
- find the inverse of $\begin{bmatrix} 2 & 0 & -1 \\ 5 & 1 & 0 \\ 0 & 1 & 3 \end{bmatrix}$ if it exists.
- Determine the inverse of $\begin{bmatrix} 2 & -3 & 3 \\ 2 & 2 & 3 \\ 3 & -2 & -2 \end{bmatrix}$ if it exists.
- Express the given matrix as the sum of the symmetric and the skew-symmetric matrix.
$$\begin{bmatrix} 3 & 5 \\ 1 & -1 \end{bmatrix}$$
- If $A = \begin{bmatrix} \cos\lambda & -\sin\lambda \\ \sin\lambda & \cos\lambda \end{bmatrix}$ and $A+A'=I$, then the value of λ is
 - $\pi/6$
 - π
 - $\pi/3$
- Determine the values of the variables such as a, b, c and d from the given equation:
$$\begin{bmatrix} a-b & 2a+c \\ 2a-b & 3c+d \end{bmatrix} = \begin{bmatrix} -1 & 5 \\ 0 & 13 \end{bmatrix}$$
- If $A = \begin{bmatrix} 3 & -2 \\ 4 & -2 \end{bmatrix}$ and $I = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$, find k so that $A^2=KA-2I$
- 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 an any positive integer.
- If $A = \begin{bmatrix} 2 & 2 & -4 \\ -4 & 2 & -4 \\ 2 & -1 & 5 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & -1 & 0 \\ 2 & 3 & 4 \\ 0 & 1 & 2 \end{bmatrix}$ then find BA and use this to solve the system of equations $y+2z+7, x-y=3$ and $2x+3y+4z=17$.
- Using the matrix method, solve the system of equation $3x+2y-2z=3, x+2y+3z=6, 2x-y+z=2$.

ASSIGNMENT -2

1. Find $\frac{dy}{dx}$ for the following:

(a) $y = \frac{1}{\sqrt{a^2 - x^2}}$

(b) $y = \frac{5x}{\sqrt[3]{1-x^2}} + \sin^2(2x+3)$

(c) $y = \frac{\cos x + \sin x}{\cos x - \sin x}$

(d) $y = \log \sqrt{\frac{1 + \cos^2 x}{1 - e^{2x}}}$

(e) $y = \log(x + \sqrt{1+x^2})$

(f) $y = \sqrt{\frac{1 - \sin 2x}{1 + \sin 2x}}$

2. Show that $\frac{d}{dx} \left[\frac{x}{2} \sqrt{a^2 - x^2} + \frac{a^2}{2} \sin^{-1} \left(\frac{x}{a} \right) \right] = \sqrt{a^2 - x^2}$.

3. If $y = \sqrt{\frac{1-x}{1+x}}$, prove that $(1-x^2) \frac{dy}{dx} + y = 0$.

4. If $y = (x + \sqrt{x^2 + a^2})^n$, prove that $\frac{dy}{dx} = \frac{ny}{\sqrt{x^2 + a^2}}$.

5. Find $\frac{dy}{dx}$ for the following:

(a) $\sin^{-1}(\cos x) + \cos^{-1}(\sin x)$

(b) $\tan^{-1} \left(\frac{1 - \cos x}{\sin x} \right)$

(c) $\tan^{-1} \left(\frac{\cos x - \sin x}{\cos x + \sin x} \right)$

(d) $\tan^{-1} \left(\sqrt{\frac{1 + \sin x}{1 - \sin x}} \right)$

(e) $\tan^{-1} \left(\frac{\sqrt{1 + \sin x} + \sqrt{1 - \sin x}}{\sqrt{1 + \sin x} - \sqrt{1 - \sin x}} \right)$

6. Find $\frac{dy}{dx}$ for the following:

(a) $\cos^{-1}(4x^3 - 3x)$

(b) $\cot^{-1} \left(\frac{1-x}{1+x} \right)$

(c) $\tan^{-1} \left(\frac{\sqrt{1+x^2} - 1}{x} \right)$

(d) $\tan^{-1} \left(\frac{\sqrt{1+x^2} - \sqrt{1-x^2}}{\sqrt{1+x^2} + \sqrt{1-x^2}} \right)$

(e) $\sin^{-1} \left(\frac{5x + 12\sqrt{1-x^2}}{13} \right)$

7. If $\sqrt{1-x^2} + \sqrt{1-y^2} = a(x-y)$, prove that $\frac{dy}{dx} = \sqrt{\frac{1-y^2}{1-x^2}}$.

8. If $y = \sqrt{x} + \frac{1}{\sqrt{x}}$, prove that $2x \frac{dy}{dx} + y = 2\sqrt{x}$.

ASSIGNMENT -3

- $\sin^{-1}[2x\sqrt{(1-x^2)}] =$
(a) $\frac{1}{2}\sin^{-1}x$ (b) $2\sin^{-1}x$ (c) $\sin^{-1}x$ (d) none
- $\tan^{-1}\frac{\sqrt{a-x}}{\sqrt{a+x}} =$
(a) $\frac{1}{2}\cos^{-1}\frac{x}{a}$ (b) $\frac{1}{2}\cot^{-1}\frac{x}{a}$ (c) $\cos^{-1}\frac{x}{a}$ (d) $\frac{1}{2}\sin^{-1}\frac{x}{a}$
- If $\tan^{-1}x + \tan^{-1}\frac{1}{7} = \frac{\pi}{4}$, then $x =$
(a) $\frac{7}{6}$ (b) $\frac{4}{3}$ (c) $\frac{3}{4}$ (d) $\frac{6}{7}$
- $\sec^{-1}(\sec\frac{\pi}{3}) =$
(a) $\frac{2\pi}{3}$ (b) $\frac{\pi}{3}$ (c) π (d) none
- The value of $\sin(2\cos^{-1}(-\frac{3}{5}))$ is
(a) None of these (b) $-\frac{24}{25}$ (c) $\frac{7}{25}$ (d) $\frac{24}{25}$
- What is the value of expression $[\cot^{-1}\{\cos(\tan^{-1}1)\}]$?
(a) $\frac{\sqrt{2}}{\sqrt{3}}$ (b) $\frac{1}{\sqrt{3}}$ (c) 1 (d) none
- If $4\cos^{-1}x + \sin^{-1}x = \pi$ then $x =$
(a) $\frac{1}{2}$ (b) $\frac{1}{\sqrt{2}}$ (c) $\frac{\sqrt{3}}{2}$ (d) 0
- If $\tan^{-1}3 + \tan^{-1}x = \tan^{-1}8$, then $x =$
(a) $\frac{7}{9}$ (b) $\frac{4}{3}$ (c) $\frac{3}{4}$ (d) $\frac{1}{5}$
- If $\sin^{-1}x - \cos^{-1}x = \frac{\pi}{6}$, then $x =$
(a) $\frac{1}{2}$ (b) $\frac{1}{\sqrt{2}}$ (c) $\frac{\sqrt{3}}{2}$ (d) 0

BIOLOGY

(a) Make an investigatory project on any topic of your choice as per the guidelines of CBSE.

(b) Complete the given assignment in the note book.

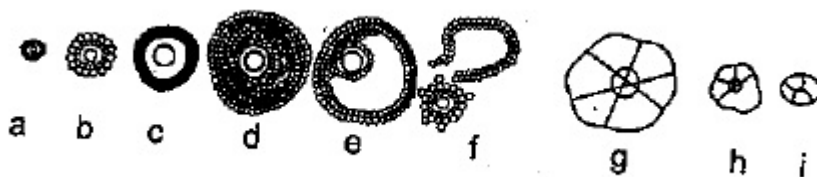
SECTION -A

- In humans, at the end of the first meiotic division, the male germ cells differentiate into
 - spermatids
 - spermatogonia
 - secondary spermatocyte
 - primary spermatocyte
- Some important events in the human female reproductive cycle are given below. Arrange the events in a proper sequence.
 - Secretion of FSH
 - growth of corpus luteum
 - growth of the follicle and oogenesis
 - ovulation
 - sudden increase in the levels of LH
 - ADCEB
 - BACDE
 - CADBE
 - ACEDB
- In the human female the blastocyst
 - forms placenta even before implantation
 - gets implanted into uterus 3 days after ovulation
 - gets nutrition from uterine endometrial secretion only after implantation
 - gets implanted in the endometrium by the trophoblast cells.
- Select the correct option describing gonadotropin activity in a pregnant female
 - High level of FSH and LH stimulates the thickening of endometrium
 - High level of FSH and LH facilitates the implantation of embryo
 - High level of hCG stimulates the synthesis of estrogen and progesterone
 - High level of hCG stimulates the thickening of endometrium.
- Vasa efferentia are the ductules leading from
 - epididymis to urethra
 - testicular lobules to rete testis
 - rete testis to vas deferens
 - vas deferens to epididymis
- Grey crescent is the area
 - at the point of entry of sperm into ovum
 - just opposite to the site of entry of sperm into ovum
 - at the animal pole
 - at the vegetal pole
- The first movements of the foetus and appearance of hair on its head are observed during which month of pregnancy?
 - Third month
 - Fourth month
 - Fifth month
 - Sixth month
- What happens during fertilization in humans after many sperms reach the ovum
 - Secretions of acrosome help one sperm
 - all sperms except the one nearest to the ovum lose their tails
 - cells of corona radiata trap all the sperms except one

- d) only 2 sperms nearest the ovum penetrate zona pellucida
9. Select the incorrect statement
- LH triggers ovulation in ovary
 - LH & FSH decrease gradually during the follicular phase
 - LH triggers secretion of androgens from the Leydig cells
 - FSH stimulates Sertoli cells which help in spermiogenesis
10. Embryo with more than 16 blastomeres formed due to in vitro fertilization is transferred into
- uterus
 - fimbriae
 - fallopian tube
 - cervix

SECTION -B

- What structure forms the corpus luteum and at what stage? Name the two hormones secreted by it.
- What is the main content of acrosome? What is its function?
- What is seminal plasma? What its components?
- What is the number of chromosomes in the following cells of human male.
 - Spermatogonia cells
 - Spermatids
 - Primary spermatocytes
 - Sertoli cells.
- What is the number of chromosomes in the following cells of a human female.
 - Primary oocyte
 - ootid
 - Secondary oocyte
 - Follicle cells
- What is meant by L-H surge? When does it occur?
- Bring out differences between secondary and tertiary follicles.
- Enumerate the functions of placenta.
- Define parturition where do signals for it originate from?
- The following is the illustration of the sequence of ovarian events "a" to "i" in a human female:



- Identify the figure that illustrates corpus luteum and name the pituitary hormone that influences its formation.
 - Specify the endocrine function of corpus luteum. How does it influence the uterus? Why is it essential?
 - What is the difference between "d" and "e"?
 - Draw a neat labelled sketch of Graafian follicle.
- Draw a flow chart showing hormonal control of human female reproductive system.
Highlight the positive and negative feedback.
 - Describe and illustrate the following changes during menstrual cycle:
 - Changes in the uterus.
 - Changes in the ovary.
 - Hormonal changes.
 - Describe the development of foetus through various stages during gestation period (month wise).
 - A sperm has just fertilized a human egg in the fallopian tube. Trace the path that

the fertilized egg will undergo the implantation of the blastocyst in the uterus.

15. The following figure shows a foetus within the ute



rus

(a) In the above figure, choose and name the correct part (A, B, C or D) that act as a temporary endocrine gland and substantiate your answer. Why is it also called the functional junction?

(b) Mention the role of B in the development of the embryo.

(c) Name the fluid surrounding the developing embryo. How is it misused for sex-determination ?

PHYSICAL EDUCATION

1. Prepare practical file of Physical Education.

- Write about the motor fitness test all the seven items.
- Yoga and its importance.
- Five diseases and 2 asans of each disease
- Specialised Sports

2. Assignment

Write in PE note book.

- Draw a knockout picture of 21 teams.
- Draw a knockout fixture of 24 teams in which two teams are special seeded.
- Draw a league fixture of 9 teams through cyclic method.
- Prepare flowchart of micro and macronutrients