



SHAHEED BISHAN SINGH MEMORIAL SR. SEC. SCHOOL

F-213 A, Mansarovar Garden, New Delhi, Delhi 110015

Fully air-conditioned smart school

Phone:9625869243,011-41421862 Email ID- contactus@sbsmschool.com

website: www.sbsmschool.com; school ID-1516119, Affiliation no- UCU0037

HOLIDAY HOMEWORK (2026-27)

CLASS –XII

Dear Parents,

An exciting time is here once again — it's summer vacation, filled with fun, learning, and new experiences. Keeping this in mind, SBSM School has planned a variety of interesting activities to keep the children positively engaged and their energies well directed. We request parents to kindly guide, encourage, and motivate their wards while also allowing them to work independently and creatively. Your support and cooperation will help make this holiday both enjoyable and productive for the children.

Instructions for Parents/students:-

- Eat healthy food and drink plenty of water, take good care of your health.
- Develop English speaking habit during vacation.
- Revise and learn all your lessons completed till date.
- Complete your pending class work, homework and correction work.
- Learn to present some act, speech or poem etc. for assembly.
- Encourage your child to read 3-4 pages from a book or newspaper daily to develop a reading habit.

Kindly go through the following important instructions regarding the Holiday Homework:

- All the worksheets given in the Holiday Homework are to be completed in **fair notebooks/files as stated in the homework instructions.**
- All Holiday Homework notebooks and files will be collected on **6th July 2026.**
- Summer Holidays will be from **30th May 2026 to 5th July 2026.**
- Each subject Holiday Homework will be awarded marks in Practicals; therefore, students are advised to complete all work neatly and sincerely.
- A separate Civic Sense Homework has also been given, which is to be done on A4 size sheets.
- A PPT is to be prepared on Microsoft PowerPoint.
- ***Students are also requested to complete all Practical/Project file work as instructed by the subject teachers to help manage time more efficiently in studies after the school reopens.***

Kindly ensure timely completion of all assigned work.

Wishing all our students a happy, safe, and productive summer vacation!

CIVIC SENSE ACTIVITY

CLASS XI AND XII

Civic sense is an important part of being a responsible citizen. It teaches us to respect public property, follow rules, maintain cleanliness, help others, and behave responsibly in society. Good civic sense helps in creating a clean, safe, disciplined, and peaceful environment for everyone. Small habits like using dustbins, following traffic rules, saving water, and respecting others can bring a positive change in society and make our country a better place to live.

1. Gratitude Activity

Topic: “Expressing Gratitude Towards Helpers Around Us”

Objective: To develop respect, kindness, and appreciation for people who contribute to our daily lives.

Activity Instructions

- Students will express gratitude towards any three people such as parents, grandparents, domestic helpers, drivers, security guards, teachers, or sanitation workers.
- Thank them personally through words, a small note, or helping them in their work.
- Click photographs/selfies while performing the activity.

Reflection Questions

- How gratitude improves society
- Importance of respecting every individual
- What you learned from this activity

Creative Component

Students may prepare a short reel/video on gratitude

OR

a PowerPoint Presentation with photographs and captions.

2. Road Safety & Helmet Awareness Activity

Topic: “Helmet On, Safety On”

Objective: To create awareness about road safety and responsible citizenship.

Activity Instructions

- Click photographs wearing a helmet properly.
- Create awareness among family members/friends about road safety rules.
- Observe traffic behaviour in your locality and note how many riders wear helmets and common traffic rule violations.

Reflection Questions

- Why is wearing a helmet important?
- How does following traffic rules show civic sense?
- What can students do to spread road safety awareness?

Creative Component

Students may prepare a short awareness reel/video OR a PPT with slogans, photographs, and road safety messages.

3. Helping at Home Activity

Topic: "Helping at Home: A Responsible Citizen's Duty"

Objective: To encourage students to develop responsibility, empathy, discipline, and respect towards family members through active participation in household work.

Activity Instructions

- Students will assist their parents/guardians in household work for at least 5 days during the holidays.
- Examples of activities include cutting vegetables, arranging kitchen items, serving food, preparing simple dishes, cleaning the dining area, dusting household furniture, putting washed clothes in sunlight for drying, watering plants, and organising books or cupboards.
- Click photographs/selfies while helping at home.

Reflection Questions

- What you learned from helping at home
- Importance of sharing responsibilities
- How helping family members reflects good civic sense

Creative Component

Students may prepare a short reel/video showing their participation

OR

a PowerPoint Presentation with photographs and captions related to the activity.

Note: Civic Sense Activities can be performed in groups. The PPT/Reels prepared for the activity must be shared with the Class Teacher along with a properly mentioned list of students participating in the activity. Kindly note that at least two out of the three given activities are mandatory for each child to perform.

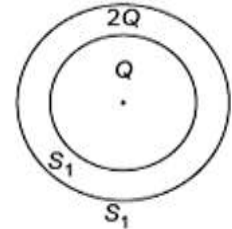
PHYSICS (042)

CLASS XII

WORKSHEET 1

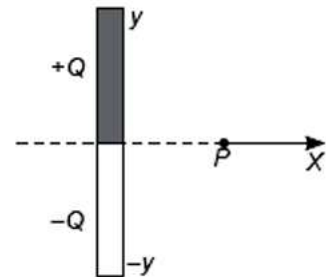
ELECTRIC CHARGES AND FIELDS

1. S_1 and S_2 are two hollow concentric spheres enclosing charge Q and $2Q$ respectively as shown in figure. (i) What is the ratio of the electric flux through S_1 and S_2 ? (ii) How will the electric flux through the sphere S_1 change, if a medium of dielectric constant ϵ is introduced in the space inside S_1 in place of air?

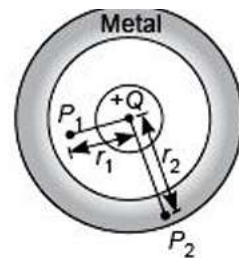


2. Define electric flux. Write its SI units. A spherical rubber balloon carries a charge that is uniformly distributed over its surface. As the balloon is blown up and increases in size, how does the total electric flux coming out of the surface change? Give reason.

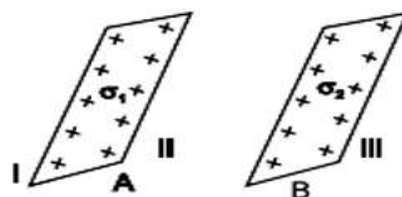
3. The figure given below shows a uniformly charged non-conducting rod. What is the direction of electric field at point P due to the charge on the rod?



4. A small metal sphere carrying the charge $+Q$ is located at the centre of a spherical cavity in a large uncharged metal sphere as shown in the figure. Use the Gauss's theorem to find the electric flux at points P_1 and P_2 .



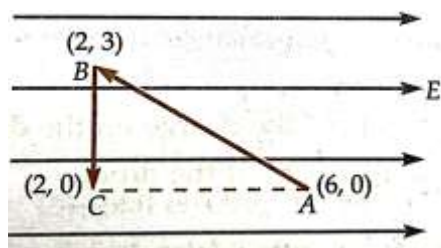
5. (a) A point charge $(+Q)$ is kept in the vicinity of uncharged conducting plate. Sketch electric field lines between the charge and the plate.
(b) Two infinitely large plane thin parallel sheets having surface charge densities σ_1 and σ_2 ($\sigma_1 > \sigma_2$) are shown in the figure. Write the magnitudes and directions of net fields in the regions marked II and III.



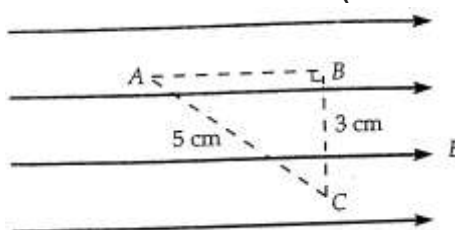
WORKSHEET 2

ELECTRIC POTENTIAL AND CAPACITANCE

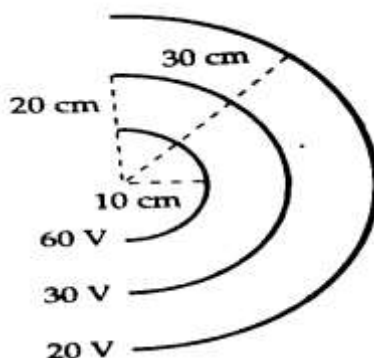
1. A test charge 'q' is moved without acceleration from A to C along the path from A to B and then B to C in electric field E as shown in below figure. (i) Calculate the potential difference between A and C. (ii) At which point (of the two) is the electric potential more and why? (Ans: $\frac{V_c - V_a}{4}$, $V_c > V_a$)



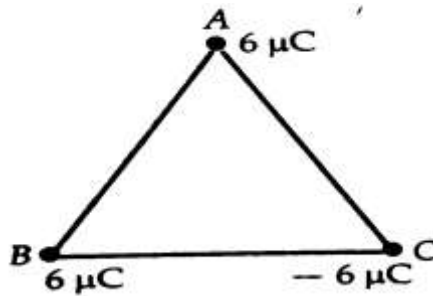
2. Three points A, B and C lie in a uniform electric field (E) of 5×10^3 N/C as shown in below figure. Find the potential difference between A and C. (Ans: -200 V)



3. Below figure shows some equipotential surfaces. What can you say about the magnitude and the direction of the electric field?



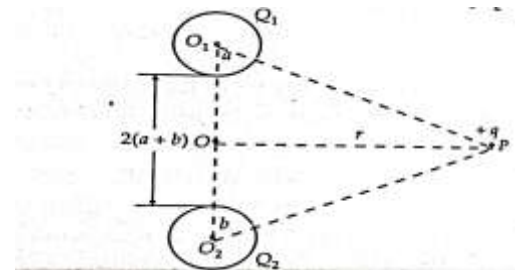
4. Three charges $-q$, $+Q$, and $-q$ are placed at equal distances on a straight line. If the potential energy of the system of three charges is zero, find the ratio Q/q . (Ans: 1:4)
5. Two point charges A and B of values $+15 \mu\text{C}$ and $+9 \mu\text{C}$ are kept 18cm apart in air. Calculate the work done when charges B is moved by 3cm towards A. (Ans: 1.35 J)
6. Two charges of magnitude 5nC and -2nC , are placed at points $(2\text{cm}, 0, 0)$ and $(x \text{ cm}, 0, 0)$ in a region of space, where there is no other external field. If the electrostatic potential energy of the system is $-0.5 \mu\text{J}$, what is the value of x ? (Ans: 4cm)
7. Find the amount of work done in arranging the three point charges, on the vertices of an equilateral triangle ABC of side 10cm as shown in below figure? (Ans: -3.24J)



8. Three point charges $+q$, $+2q$ and Q are placed at the three vertices of an equilateral triangle. Find the value of charge Q (in terms of q), so that electric potential energy of the system is zero. (Ans: $Q = -2q/3$)
9. An electric dipole of length 2cm is placed with its axis making an angle of 60° to a uniform electric field of 10^5 N/C . If it experiences a torque of $8\sqrt{3} \text{ Nm}$, Calculate the
- Magnitude of the charge on the dipole, and
 - Potential energy of the dipole
- (Ans: $8 \times 10^{-3} \text{ C}$, $4\sqrt{3} \text{ Nm}$)

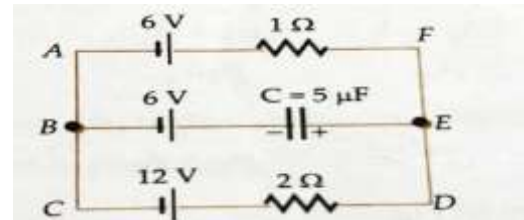
10. Find the P.E associated with a charge ' q ' if it were present at the point P with respect to the 'set-up' of two charged spheres, arranged as shown in below figure. Here O is the mid-point of the line O_1O_2 .

(Ans: $U = qV = \frac{q}{4\pi\epsilon_0} \left[\frac{Q_1}{[r^2 + (2a+b)^2]^{1/2}} + \frac{Q_2}{[r^2 + (a+2b)^2]^{1/2}} \right]$)



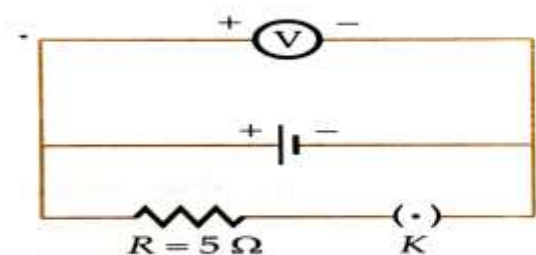
WORKSHEET 3 CURRENT ELECTRICITY

1. In the circuit shown in figure, with steady current, calculate the potential difference across the capacitor and the charge stored in it. (Ans: $10 \mu\text{C}$)

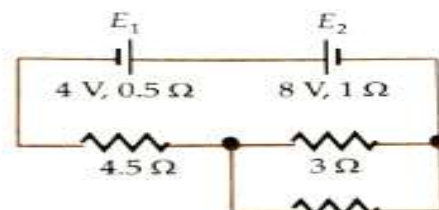


2. A 9 V battery is connected in series with a resistor. The terminal voltage is found to be 8 V . Current through the circuit is measured as 5 A . What is the internal resistance of the battery? (Ans: 0.2Ω)

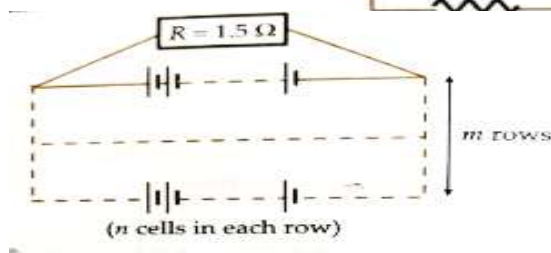
3. The reading on a high resistance voltmeter when a cell is connected across it is 2.2 V . When the terminals of the cell are also connected to a resistance of 5Ω , the voltmeter reading drops to 1.8 V . Find the internal resistance of the cell? (Ans: 1.1Ω)



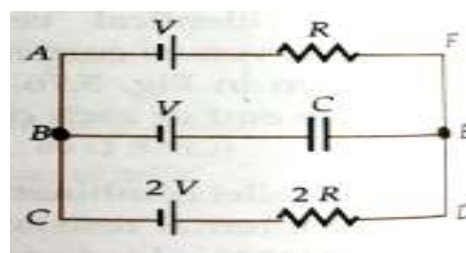
4. In the circuit diagram given, the cells E_1 and E_2 have emfs 4 V and 8 V and internal resistances 0.5Ω and 1.0Ω respectively. Calculate the current in each resistance.
(Ans: $4.5 \Omega \rightarrow 0.5 \text{ A}$, $3 \Omega \rightarrow 1/3 \text{ A}$, $6 \Omega \rightarrow 1/6 \text{ A}$).



5. 12 cells, each of emf 1.5 V and internal resistance of 0.5Ω , are arranged in m rows each containing n cells connected in series, as shown in below figure. Calculate the values for n and m for which this combination would send maximum current through an external resistance of 1.5Ω (Ans: $n = 6$, $m = 2$).

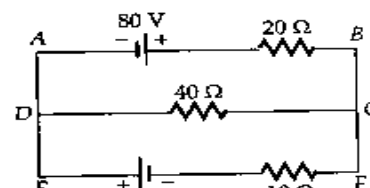


6. In the circuit shown in figure in the steady state, obtain the expression for (i) the potential drop (ii) the charge and (iii) the energy stored in the capacitor, C.

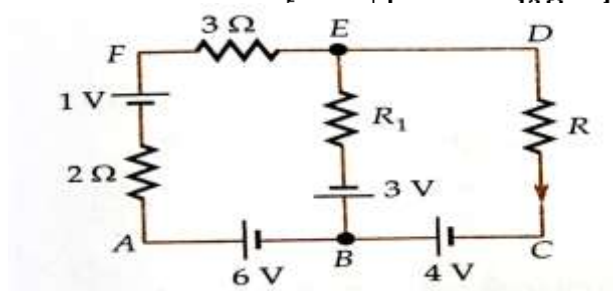


7. Two wires A and B of the same material and having same length, have their cross-sectional areas in the ratio 1:4. What would be the ratio of heat produced in these wires when same voltage is applied across each? (Ans: 1:4).

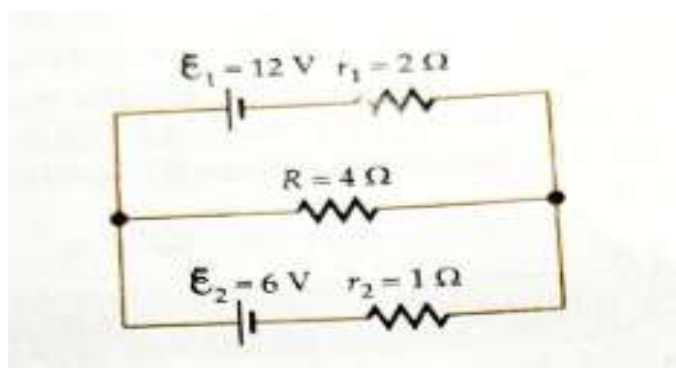
8. Using Kirchhoff's rules, calculate the current through 40Ω and 20Ω resistors in the circuit shown below. (Ans: $40 \Omega \rightarrow 0 \text{ A}$, $20 \Omega \rightarrow 4 \text{ A}$)



9. Use Kirchhoff's rules to determine the potential difference between the points A and D when no current flows in the arm BE of the electric network shown below. (Ans: 9 V)

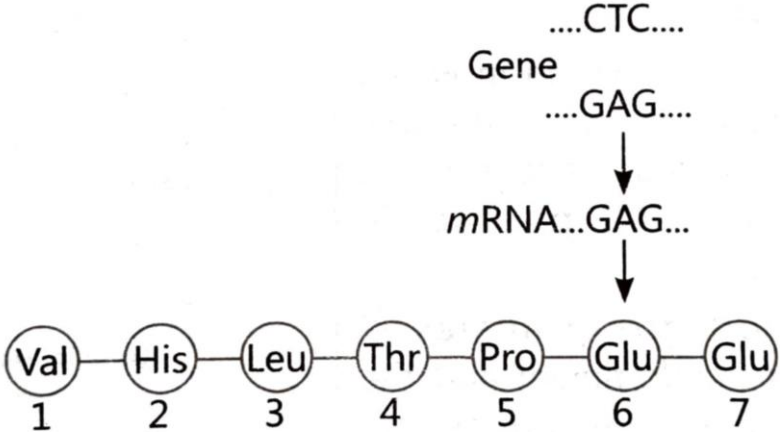
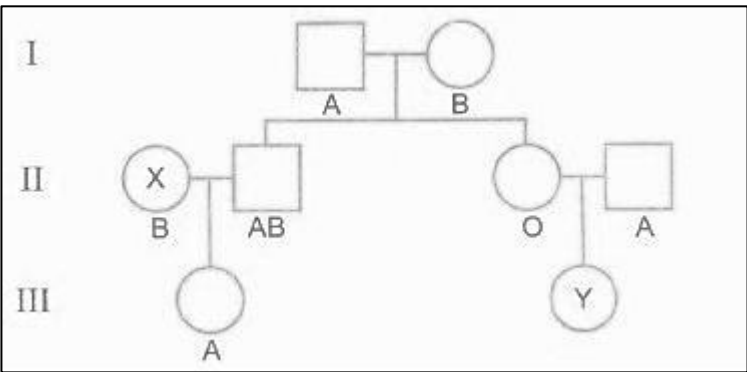


10. Find the potential difference across each cell and the rate of energy dissipation in R. (Ans: $48/7 \text{ V}$, 11.75 J).



HOLIDAY HOMEWORK 2026-27

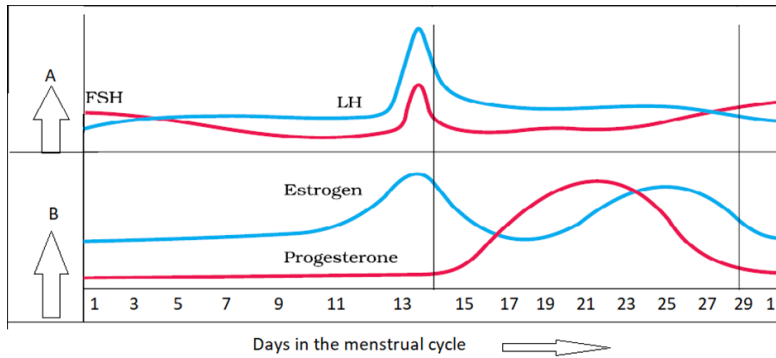
CLASS- XII BIOLOGY (044)

<p>Q1</p>	<p>Given below is the representation of amino acid composition of the relevant translated portion of beta-chain of haemoglobin, related to the shape of human RBCs.</p> <div style="text-align: center;"> <p>....CTC....</p> <p>Gene</p> <p>....GAG....</p> <p>↓</p> <p>mRNA...GAG...</p> <p>↓</p>  <p>Hba Peptide</p> </div>
<p>(a)</p>	<p>Is this representation indicating a normal human or a sufferer from certain related genetic disorder? Identify the related blood disorder.</p>
<p>(b)</p>	<p>Give reason in support of your answer.</p>
<p>(c)</p>	<p>a) What difference would be noticed in the phenotype of the normal and the sufferer related to this gene? Write any one affect on body of sufferer.</p> <p>b) Who are likely to suffer more from the defect related to the gene represented- the males, the females or both males and females equally? And why?</p>
<p>Q2</p>	<p>Study the pedigree chart showing the pattern of inheritance of blood group character in a family.</p> <div style="text-align: center;">  </div> <p>(a) Give the genotypes of the parents in generation I.</p> <p>(b) State the possible genotypes of the individual X in generation II.</p> <p>(c) State the possible genotypes of the individual Y in generation III.</p> <p>(d) How does the inheritance of this blood group explain co dominance?</p> <p style="text-align: center;">OR</p> <p>(d) Which group is considered universal donor and why?</p>

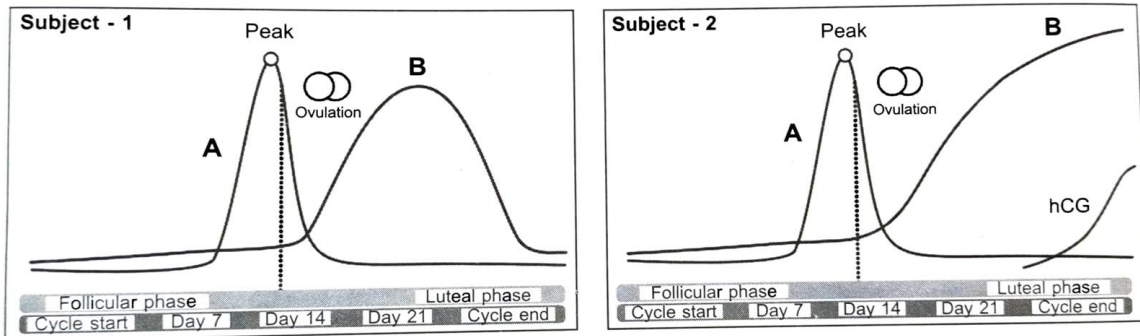
<p>Q3</p>	<p>Haemophilia is a sex- linked recessive disorder of human. The pedigree chart given below shows the inheritance of haemophilia in one family. Study the pattern of inheritance and answer the questions given.</p>
<p>a)</p>	<p>What is the probability of their first child to be haemophilic male?</p>
<p>b)</p>	<p>How do haemophilic patients suffer?</p>
<p>c)</p>	<p>Why are human females rarely haemophilic ? What are the genotypes of members 1,2,4 and 5 respectively?</p>
<p>Q4</p>	<p>A cross was carried out between two pea plants showing the contrasting traits of height of the plants. The result of the cross showed 50% parental characters.</p> <p>(a) Work out the cross with the help of a Punnett square. (b) Name the type of the cross carried out.</p>
<p>Q5</p>	<p>a) Given below is a T.S of an apple. Identify a, b, and c. b) Why is an apple categorized as a false fruit?</p>
<p>Q6</p>	<p>Human female reproductive system consists of a pair of ovaries, accessory glands, ducts associated with formation of gametes and production of sex hormones. Study the figure and answer the following questions:</p> <p>a) Label all parts b) write functions of all parts</p>
<p>Q7</p>	<p>A true- breeding pea plant homozygous for axial, violet flowers is crossed with another pea plant with terminal, white flowers (aavv).</p> <p>a) What would be the phenotype and genotype of F1 and F2 generations? b) List the Mendel's generalizations that can be derived from the above cross.</p>

Q8 In the figure given below, parts A and B show the level of hormones which influence the menstrual cycle. Study the figure and answer the questions that follow:

- Name the organs which secrete the hormones represented in parts A and B.
- State the impact of the hormones in part B on the uterus of the human female during 16 to 15 days of menstrual cycle



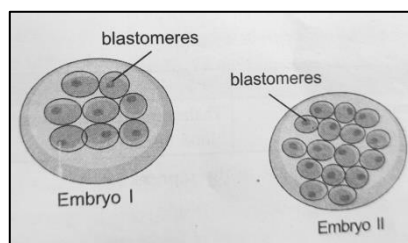
Q9 Study the given graphs for two women I and II that shows the different levels of certain hormones and answer the questions given below



- What is meant by ovulation?
- Name the hormone A that has reached its peak level in both women I and II and mention its source.
- Name the hormone B and mention its source. Give reason, why its curve in woman I differs from that in woman II.
- Expand hCG shown in the graph 2 and mention the source tissue/organ

Q10 Cryptorchidism is a condition in which the testes fail to descend into the scrotum. It can also lead to compromised sertoli cell function and has an impact on leydig cell function.

- Identify at least 3 parameters of male fertility which get affected due to cryptorchidism.
- Which process will be affected if mature spermatids are not released from sertoli cells?
- Name and explain one ART process in which the sperm/semen is used to assist fertilisation.
- Name and explain the ART that should be used to complete the development of embryos I and II shown in the figure given below.



11	<p>A woman has certain queries as listed below, before starting with contraceptive pills. Answer them.</p> <p>a) What do contraceptive pills contain and how do they act as contraceptives?</p> <p>b) What schedule should be followed for taking these pills?</p> <p>c) Why Saheli is considered as ideal contraceptive pill? (four points)</p>
Q12	<p>a) Name the hormones secreted and write their functions:</p> <p>i) By corpus luteum and placenta (any two)</p> <p>ii) During follicular phase of menstruation and parturition</p> <p>b) Name the stages in human female, where:</p> <p>i) Corpus luteum and placenta co-exist.</p> <p>ii) Corpus luteum temporarily ceases to exist.</p>
Q13	<p>Why does corpus luteum stay active throughout pregnancy, but in the absence of fertilisation, it remains active only for 10-12 days.</p>
Q14	<p>List any two types of IUDs that are available to human females and state their mode of action as contraceptives.</p>
Q15	<p>a) Expand the abbreviations of different modes of ARTs</p> <p>a) ZIFT b) ICSI c) IUT d) GIFT</p> <p>b) Which one of them cannot be considered as a procedure of IVF? Give reason to support your answer.</p> <p>c) Differentiate between ICSI and ZIFT</p>

CHEMISTRY (043)

CLASS XII

WORKSHEET 1

Part A-MCQ

1. The unit of molality is:

- (a) mol^{-1} (b) mol kg^{-1} (c) g l^{-1} (d) kg mol^{-1}

2. Which of the following is an ideal solution?

- (a) Ethanol + Water (b) Acetone + Chloroform (c) Benzene + Toluene (d) HCl + Water

3. According to Raoult's law: $p_i = x_i p_i^0$

- (a) Vapour pressure is independent of mole fraction.
(b) Vapour pressure is directly proportional to mole fraction.
(c) Vapour pressure decreases with temperature.
(d) Vapour pressure becomes zero.

4. The factor by which the freezing point of a solution decreases is called:

- (a) Osmotic pressure (b) Elevation constant (c) Depression constant (d) Boiling constant

5. Which property depends on the number of solute particles?

- (a) Viscosity (b) Surface tension (c) Colligative property (d) Density

6. Reverse osmosis is used for:

- (a) Crystallization (b) Water purification (c) Distillation (d) Sublimation

7. Osmotic pressure is represented by:

- (a) $\pi = CRT$ (b) $PV = n RT$ (c) $K = CRT$ (d) $P = CRT^2$

8. Which solution shows positive deviation from Raoult's law?

- (a) Acetone + Chloroform (b) Ethanol + Acetone (c) HNO_3 + Water (d) Phenol + Aniline

Part B – Assertion and Reason Questions

Directions:

Choose the correct option:

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

1. Assertion: Colligative properties depend upon the number of solute particles.

Reason: They are independent of the nature of solute.

2. Assertion: Vapour pressure of a solution decreases after adding a non-volatile solute.

Reason: Mole fraction of solvent decreases.

3. Assertion: Molality is preferred over molarity in calculating colligative properties.

Reason: Molality is independent of temperature.

4. Assertion: Ideal solutions obey Raoult's law at all concentrations.

Reason: Intermolecular forces between A–B molecules are same as A–A and B–B molecules.

Part C – Very Short Answer Questions (2 Marks)

1. Define molarity and molality.
2. State Raoult's law for a volatile component in a solution.
3. Why do colligative properties depend only on the number of particles?
4. What is osmotic pressure?
5. Define azeotropes with one example.

Part D – Short Answer Questions (3 Marks)

1. Explain positive and negative deviations from Raoult's law with one example each.
2. Explain isotonic, hypotonic and hypertonic solutions with the help of an example
3. Define the following:
 - a) Relative lowering of vapour pressure
 - b) Elevation in boiling point
 - c) Depression in freezing point
4. Calculate the molarity of a solution containing 9.8 g of H_2SO_4 in 500 mL solution.
5. A solution contains 5 g glucose in 100 g water. Calculate the molality of the solution.

Part E – Long Answer Questions (5 Marks)

1. Explain the following colligative properties:
 - a) Relative lowering of vapour pressure
 - b) Elevation in boiling point
 - c) Depression in freezing point
 - d) Osmotic pressure
2. Derive the relation for depression in freezing point.

$$\Delta T_f = K_f m$$

3. What is reverse osmosis? Explain its application in desalination of water.
4. A solution is prepared by dissolving 18 g glucose in 1 kg water. Calculate:

a) Molality

b) Elevation in boiling point

(K_b for water = $0.52 \text{ K kg mol}^{-1}$)

Previous Year Questions

1. Define ideal and non-ideal solutions. Give one example of each.
2. What is meant by abnormal molecular mass? How is it related to van't Hoff factor?
3. State Henry's law and write its mathematical expression.
4. Calculate the osmotic pressure of a solution at 300 K containing 2 g of glucose per litre. (Molar mass of glucose = 180 g mol^{-1} , $R = 0.0821 \text{ L atm K}^{-1} \text{ mol}^{-1}$).
5. Why is osmotic pressure considered a colligative property?

Case-Based Question

A student prepared a sugar solution by dissolving sugar in water and observed that the boiling point of the solution increased.

Answer the following:

- (a) What type of property is involved here?
- (b) Why does boiling point increase?
- (c) Name one more colligative property.
- (d) What happens to vapour pressure on adding sugar?

HOTS Questions

1. Why does common salt reduce the freezing point of water on roads during snowfall?
2. Why is seawater difficult to freeze compared to pure water?

NOTE- PLEASE COMPLETE YOUR PRACTICAL FILES AND PROJECT FILES.

----X-----X-----X----X

COMPUTER SCIENCE (083)

CLASS XII

Holidays Home Work

Dear Students,

As discussed and explained in class, you are required to prepare a Python Program File using MS Word during the holidays.

The document should include:

1. Basic Python Programs
 - 25 to 30 programs/questions
2. Exception Handling
 - 2 to 3 programs/questions
3. File Handling with Text Files
 - 8 to 10 programs/questions
4. File Handling with Binary Files
 - 5 to 6 programs/questions

Instructions to Follow

1. Write all the questions neatly and properly in the MS Word document.
2. Perform all practicals using Python software.
3. Take screenshots of:
 - Python program/code
 - Output/results
4. Paste the screenshots below their respective questions in the document.
5. Arrange the work neatly with proper headings and formatting.

Submission Guidelines

- The homework must be completed during the holidays.
- Ensure the document is clean, organized, and properly maintained.
- Submit the printed file/soft copy as instructed after the holidays.

Complete your work sincerely and on time and send the MS Word file to: mahalrinky@gmail.com

ECONOMICS (030)

CLASS XII

WORKSHEET 1

Q1. Explain using numerical example, how an increase in reserve deposit ratio affects the credit creation power of the banking system.

Q.2 Explain the functions of the central bank

- a) Banker to the government
- b) Lender of the last resort
- c) Bankers bank

Q.3 “With an objective to reduce inflation, Reserve Bank of India may promote the commercial banks to park their surplus funds with it.” Discuss the rationale behind the step taken by the Reserve Bank of India.

Q.4 Reserve Bank of India undertakes the important function of managing the government’s banking transactions. Discuss the above stated function performed by the Reserve Bank of India.

Q.5 What do you mean by open market operations, explain how it helps in money supply?

Q.6 Briefly describe any two functions of money.

Q.7 What do you mean by legal tender money, explain

Q.8 What do you mean by money supply? Explain any two component of money supply.

Q.9 A student name Akash got admission in ABC university, he got a scholarship of ₹ 20000 and rest amount to be paid by him as a fee. He also got free books and some food refreshment.

Classify Akash’s facilities given by the university as factor income or transfer income, giving reasons for the same in support of your answer.

Q.10 State the main steps in computing national income through Income method.

Q.11 In a press briefing, RBI governor Shaktikanta das highlighted key developments in India’s Balance of Payments. He explained that India’s Current Account has shown improvement due to arise in software service exports and remittances from abroad, combined with sharp fall in imports of oil and luxury goods. These factors increased the inflow of foreign currency and reduced outflow, creating a Current account surplus. However, the Capital account witnessed a slowdown in FDI and FII due to global market uncertainties. This decline in capital inflow, led to a Capital Account deficit the overall BOP showed a deficit, forcing the central bank to dip into its official reserves to cover the gap.

Answer the following on the basis of above case.

What kind of disequilibrium is reflected in the given scenario? Explain briefly.

Do you really think central bank has taken right decision if yes, state why?

Q.12 Refer to the given text carefully:

Fiscal deficit is the difference between the government's total expenditure and its total receipts excluding borrowing. Gross fiscal deficit = Total expenditure – (Revenue receipts + Non debt creating capital receipts).

Non-debt creating capital receipts are those receipts which are not borrowings and, therefore, do not give rise to debt. Examples are recovery of loans and the proceeds from the sale of PSU s. We must note that the borrowing requirement of the government includes interest obligations on accumulated debt. The goal of measuring primary deficit is to focus on present fiscal imbalances. To obtain an estimate of borrowing on account of current expenditures exceeding revenues, we need to calculate what has been called the primary deficit it is simply the fiscal deficit minus the interest payments.

(i) Define Fiscal deficit and enlist some features associated with the same.

(ii) What is primary deficit enlist features of the same.

ACCOUNTANCY (055)

CLASS XII

WORKSHEET-1

CH-1: ACCOUNTING FOR PARTNERSHIP FIRMS – FUNDAMENTALS

- Q1. A and B share profits 3:2. Capital: A ₹4,00,000, B ₹3,00,000. Interest on capital @6% p.a. Profit ₹90,000. Calculate . Interest on capital and share of remaining profit.
- Q2. P & Q fixed capitals ₹2,50,000 & ₹1,50,000. Drawings: P ₹30,000 on 1-7-2025, ₹20,000 on 1-1-2026. Interest on drawings @10% p.a. Calculate Interest on drawings by product method.
- Q3. Profit ₹1,80,000 distributed in 3:2. IOC @5% on A ₹3,00,000 & B ₹2,00,000 omitted. Pass adjustment entry.
- Q4. L gets salary ₹5,000 p.m. M gets commission @10% on net profit after charging his commission. Profit before salary & commission ₹1,65,000. Calculate M's commission.
- Q5. X, Y, Z in 5:3:2. Z gave loan ₹60,000 on 1-10-2025. Deed silent. Profit for year ending 31-3-2026 ₹1,20,000. Calculate interest on loan & divisible profit.
- Q6. Ram & Shyam capitals ₹3,00,000 & ₹2,00,000. IOC @8% p.a. Ram gets commission @5% on net profit after charging commission. Profit before IOC & commission ₹1,00,000. Calculate Ram's commission & IOC.
- Q7. A, B, C in 3:2:1. C drew ₹12,000 at beginning of each quarter. Interest on drawings @9% p.a. Calculate interest on C's drawings.
- Q8. Net profit ₹2,10,000 distributed to X, Y, Z in 2:2:1 without interest on capital @10% p.a. on capitals X ₹4,00,000, Y ₹3,00,000, Z ₹1,00,000. Pass single adjustment entry
- Q9. L and M started business on 1-4-2025 with capitals ₹6,00,000 and ₹4,00,000. Deed provides: Interest on capital @5% p.a. L's salary ₹6,000 p.m. M to get commission ₹15,000 Interest on drawings: L ₹2,000, M ₹1,500 Remaining profit shared equally. Net profit for year ₹3,00,000. Prepare: P&L Appropriation Account.
- Q10. A, B and C are partners sharing profits in the ratio 5:3:2. As per the Partnership Deed, C is guaranteed a minimum profit of ₹60,000 p.a. Any deficiency will be borne by A and B in the ratio of 3:2. Net profit for the year ended 31-3-2026 was ₹2,40,000. Calculate the share of profit of each partner. Pass the necessary journal entry for distribution of profit.

WORKSHEET 2

CH-2: GOODWILL – NATURE AND VALUATION

Q1. Average profit ₹75,000. NRR 12%. Capital employed ₹ 5,00,000. Calculate goodwill by Capitalisation of Average Profit method

.Q2. Profits: ₹40,000, ₹50,000, ₹60,000, ₹70,000. Calculate goodwill at 2 years purchase of average profit.

Q3. Super profit ₹25,000. Normal rate of return is 10%. Calculate goodwill at 3 years purchase of super profit.

Q4. Capital employed ₹6,00,000. Average profit ₹90,000. NRR 10%. Calculate goodwill by Capitalisation of Super Profit method.

Q5. Profits: 2023 ₹50,000, 2024 ₹70,000, 2025 ₹ 90,000. Weights: 1, 2, 3. Calculate goodwill at 2 years purchase of weighted average profit.

Q6. Profits: ₹60,000, ₹75,000, ₹90,000, ₹1,20,000, ₹1,05,000. Abnormal loss ₹10,000 in year 2, abnormal gain ₹15,000 in year 4. Calculate goodwill at 3 years purchase of average profit method.

Q7. Average profit ₹1,50,000. Normal rate of return is 12%. Total assets ₹15,00,000, outside liabilities ₹3,00,000. Calculate goodwill by Capitalisation of Super Profit method.

Q8. Capital employed ₹10,00,000. Normal rate of return is 15%. Average profit ₹1,80,000. Calculate goodwill by Capitalisation of Average Profit method.

Q9 A firm earned profits for the last 3 years: ₹80,000, ₹1,00,000 and ₹1,20,000. The normal rate of return in similar business is 10%. Capital employed in the firm is ₹7,50,000.

Calculate: Goodwill using Capitalisation of Super Profit method.

Q10. The average profit of a firm is ₹90,000. The firm had non-recurring income of ₹6,000 per year on an average. The average capital employed in the business is ₹6,00,000. Normal rate of return is 12%.

Calculate: Goodwill at 4 years purchase of super profit method.

BUSINESS STUDIES (054)

CLASS XII

Q1. Volvo Ltd. target is to produce 10,000 shirts per month at a cost of ₹ 100/- per shirt. The Production Manager achieved this target at a cost of ₹ 90/- per shirt. Do you think the Production Manager is effective? Give reasons in support of your answer.

Q2. Identify the feature of management which states that the activities involved in managing an enterprise are common to all organisations whether economic, social or political.

Q3. Gold Land Pvt. Ltd. is a wheat producing company. Daily 5000 bags of wheat weighing 10 kg each are produced here. In comparison to the previous year this year has been less number of bags produced on a per day basis. The number is around 4500 which is less than the target of 5000 set by the company. The company however has been able to reduce the costs involved in comparison to last year's spending on the production and packaging of each bag. The quality of bags has also been up to the mark.

Identify the concept of management ignored here.

Q4. Dheeraj, Neeraj and Suraj are three friends. They work in the same company. They are managers but they belong to three different levels of management. Every day they meet and discuss their work with each other. One day they were having a conversation.

Dheeraj said, "These days I am having a lot of problems motivating the people at Shop Floor. I have decided to purchase two new machines. I know I will have to set an example by being the best leader."

Neeraj said, "I am having problem with knowing the exact requirement of people in my department. Different policies have to be informed to the employees so that they become aware of our company's goals. I also have to coordinate with other departmental heads to know their requirements."

Suraj said, "I have to decide for long term. I know I will be ultimately responsible for every activity. All the policies and strategies require a lot of planning before formulation."

In the above case, identify and explain the different levels of management these three friends belong to.

Q5. In a country named Wonderland acting is considered as a profession. Whosoever has to become an actor has to read books written about acting. These books tell the nuances of acting and without reading these books one can't be considered as an actor. To judge the ability of an actor an examination is conducted and then a degree is assigned to the qualified persons who can then act in films. There is also a body which provides membership to all actors. There are about thirty thousand actors in Wonderland who are compulsorily members of this organisation.

What are the three features of profession highlighted here? Also identify the lines highlighting these features.

Q6. In an organisation, a sales person is asked to clinch a deal with a buyer and is allowed to give 10% discount by the marketing manager. But, finance department tells him not to offer more than 5% discount. Which principle of management is missing in the above case and how can this be avoided?

Q7. Anand was continuously moved from one job to another in the organisation without giving him adequate time to settle down in any department. Identify and explain the principle of management overlooked here.

Q8. Which concept of management is the basis of principles and techniques of scientific management?

Q9. Just after declaration of Lok Sabha Elections, Sitaram, the production manager of X Ltd. wants to increase the speed of packaging 2019 results, the Bombay Stock Exchange price index rose by 1,000 points in a day. Identify and explain the environmental factor which led to this rise.

Q10. Planning always reduces creativity. Comment.

Q11. Which type of plan is “No Smoking”? Explain.

CLASS XII
MATHEMATICS (041)
WORKSHEET 1
INVERSE TRIGONOMETRIC FUNCTIONS

1. Prove that $\sin^{-1}(2x\sqrt{1-x^2}) = 2 \cos^{-1} x$, $\frac{1}{\sqrt{2}} \leq x \leq 1$.
2. Prove that $3 \sin^{-1} x = \sin^{-1}(3x - 4x^3)$, $x \in \left[-\frac{1}{2}, \frac{1}{2}\right]$
3. Prove that $3 \cos^{-1} x = \cos^{-1}(4x^3 - 3x)$, $x \in \left[\frac{1}{2}, 1\right]$
4. Show that: $\tan\left(\frac{1}{2} \sin^{-1} \frac{3}{4}\right) = \frac{4-\sqrt{7}}{3}$
5. Prove that $\tan^{-1} \sqrt{x} = \frac{1}{2} \cos^{-1} \left(\frac{1-x}{1+x}\right)$, $x \in [0,1]$
6. Write the principal value of $\cos^{-1} \left(\frac{\sqrt{3}}{2}\right) + \cos^{-1} \left(-\frac{1}{2}\right)$
7. Write the principal value of $\cos^{-1} \left(\frac{1}{2}\right) - 2 \sin^{-1} \left(-\frac{1}{2}\right)$.
8. Find the value of $\sin^{-1} \left(\sin \left(-\frac{17\pi}{8}\right)\right)$.
9. Evaluate: $\tan^{-1} \left[2 \cos \left(2 \sin^{-1} \frac{1}{2}\right)\right]$.
10. What is the principal value of $\cos^{-1} \left(\cos \frac{2\pi}{3}\right) + \sin^{-1} \left(\sin \frac{2\pi}{3}\right)$
11. Prove that: $\cot^{-1}(-x) = \pi - \cot^{-1} x$, $x \in \mathbb{R}$.
12. Write $\cot^{-1} \left(\frac{1}{\sqrt{x^2-1}}\right)$, $|x| > 1$ in simplest form.
13. Express $\sin^{-1} \left(\frac{\sin x + \cos x}{\sqrt{2}}\right)$; where $-\frac{\pi}{4} < x < \frac{\pi}{4}$, in the simplest form.
14. Prove that $\sin^{-1}(2x\sqrt{1-x^2}) = 2 \sin^{-1} x$
15. Using principal values, write the value of $2 \cos^{-1} \frac{1}{2} + 3 \sin^{-1} \frac{1}{2}$.

WORKSHEET 2

MATRICES AND DETERMINANTS

Q1: If $A = \begin{bmatrix} 0 & 2 \\ 3 & -4 \end{bmatrix}$ and $kA = \begin{bmatrix} 0 & 3\alpha \\ 2\beta & 24 \end{bmatrix}$, then find the values of k , α , and β

Q2: For what values of x and y are the following matrices equal?

$$A = \begin{bmatrix} 2x+1 & 3y \\ 0 & y^2-5y \end{bmatrix} \text{ and } A = \begin{bmatrix} x+3 & y^2+2 \\ 0 & -6 \end{bmatrix}$$

Q3: If A is 2×3 matrix such that AB and AB' both are defined, then find the order of the matrix B

Q4: If A is a square matrix such that $A^2 = A$, find the value of $(I + A)^3 - 7A$.

Q5: If $A = \begin{bmatrix} \cos\alpha & \sin\alpha \\ -\sin\alpha & \cos\alpha \end{bmatrix}$, then find α satisfying $0 < \alpha < \frac{\pi}{2}$ when $A + A^T = \sqrt{2} I$, where A^T is transpose of A .

Q6: If $A^T = \begin{bmatrix} 1 & -1 \\ 2 & 3 \\ 2 & 0 \end{bmatrix}$ and $B = \begin{bmatrix} 2 & 1 & 5 \\ 0 & 1 & -1 \end{bmatrix}$, then find $A-B$

Q7: If A is a skew symmetric matrix, then show that A^2 is a symmetric matrix

Q8: If $A = \begin{bmatrix} 3 & x-1 \\ 2x+3 & x+2 \end{bmatrix}$ is a symmetric matrix. Find the value of x

SHORT ANSWER TYPE QUESTIONS

Q1: If $A = \begin{bmatrix} 3 & 1 \\ -1 & 2 \end{bmatrix}$ show that $A^2 - 5A + 7I = O$. Hence find A^{-1}

Q2: Find the matrix A satisfying $\begin{bmatrix} 2 & 1 \\ 3 & 2 \end{bmatrix} A \begin{bmatrix} -3 & 2 \\ 5 & -3 \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

Q3: If $A = \begin{bmatrix} 0 & 1 \\ -1 & 0 \end{bmatrix}$, then find the real values of x and y such that $(xI + yA)^2 = A$

Q4: If A is a symmetric matrix and B is a skew symmetric matrix such that $A + B = \begin{bmatrix} 2 & 3 \\ 5 & -1 \end{bmatrix}$. Find A , B and AB

Q5: Find the values of x, y, z if $A^T A = I$, for the matrix $A = \begin{bmatrix} 0 & 2y & z \\ x & y & -z \\ x & -y & z \end{bmatrix}$

Q6: If $A = \begin{bmatrix} 1 & 0 \\ -1 & 7 \end{bmatrix}$, find k such that $A^2 - 8A + kI = O$

WORKSHEET 3

DIFFERENTIATION

1. If $y = (\sin x)^x + \sin^{-1} \sqrt{x}$ find $\frac{dy}{dx}$.
2. Find $\frac{dy}{dx}$ if $(\cos x)^y = (\cos y)^x$.
3. If $x = \sqrt{a^{\sin^{-1} t}}$, $y = \sqrt{a^{\cos^{-1} t}}$, show that $\frac{dy}{dx} = -\frac{y}{x}$.
4. If $x = a(\cos t + t \sin t)$ and $y = a(\sin t - t \cos t)$,
find $\frac{d^2y}{dx^2}$.
5. If $y = (\tan^{-1} x)^2$, show that
 $(x^2 + 1)^2 y_2 + 2x(x^2 + 1) y_1 = 2$
7. If $\log_e \sqrt{x^2 + y^2} = \tan^{-1} \left(\frac{y}{x} \right)$, prove that $\frac{dy}{dx} = \frac{x+y}{x-y}$
8. If $x^m \cdot y^n = (x+y)^{m+n}$, prove that $\frac{dy}{dx} = \frac{y}{x}$
9. If $x\sqrt{1+y} + y\sqrt{1+x} = 0$, for $-1 < x < 1$, prove that
 $\frac{dy}{dx} = -\frac{1}{1+x^2}$
10. If $y = (\log_e x)^x + x^{\log_e x}$ find $\frac{dy}{dx}$.

KINDLY NOTE: Make a separate register for these questions and attempt all questions of NCERT, including examples, from these three chapters.

PSYCHOLOGY

CLASS XII

WORKSHEET 1: Variations in Psychological Attributes

CASE 1: Rohan has difficulty in communication, self-care, and social interaction. His IQ is 60.

Questions:

1. Identify the condition.
2. State its level.
3. Mention two characteristics.

CASE 2: Aman performs well in exams, can solve practical problems, and also generates creative ideas.

Questions:

1. Which theory explains this?
2. Name the three types of intelligence shown.

CASE 3: Neha is excellent in music, while Rahul is good at mathematics, and Riya is skilled in understanding people's emotions.

Questions:

1. Which theory explains these differences?
2. Identify the types of intelligence for each student.

CASE 4: A student plans studies well, stays focused, understands concepts quickly, and remembers information in sequence.

Questions:

1. Name the model of intelligence.
2. Identify the four components shown.

CASE 5: A psychologist administers a test to 50 students at once using multiple-choice questions.

Questions:

1. Identify the type of test.

2. State one limitation of this test.
3. Name one advantage.

WORKSHEET 2: Self and Personality

CASE 1: Riya enjoys meeting new people and actively participates in school events. Her friend Mehak prefers spending time alone reading books and avoids large gatherings.

1. Which personality dimension is shown by Riya?
2. Which personality dimension is shown by Mehak?
3. Name the psychologist who explained this dimension of personality.

CASE 2: Aman failed in an examination and said, "The paper was unfair and too difficult," instead of accepting that he had not prepared properly.

1. Which ego defence mechanism is Aman using?
2. Who proposed the concept of defence mechanisms?
3. Explain the mechanism briefly.

CASE 3: During exams, Kavya controls her urge to watch television and focuses on studying to achieve good marks.

1. Which aspect of self is shown here?
2. Explain this concept briefly.
3. Mention one method to develop self-control.

CASE 4: Rohit loves trying new activities, exploring different ideas, and learning creative skills like painting and music.

1. Which factor of the Five Factor Model is reflected in Rohit's behaviour?
2. Name the model related to this trait.
3. Mention two characteristics of this factor.

CASE 5: A child cries loudly whenever he feels hungry and wants food immediately without waiting.

1. Which part of personality is reflected in this behaviour according to Freud?
2. Which principle does it follow?
3. Explain the concept briefly

CASE PROFILE:

- **Select any individual (friend, sibling, parent, relative, neighbour, teacher, etc.) above 15 years of age.**
- **Maintain confidentiality and do not mention the real name of the person. Use initials or a fictitious name.**
- **Conduct an informal interview, observation and psychological assessments to collect information.**
- **The Case Profile should be handwritten.**

ENGLISH CORE (301)

CLASS XII

WORKSHEET 1 - INVITATION WRITING

- Q1. You are Rohan/Riya Malhotra of Green Park, New Delhi. Draft a formal invitation card inviting your relatives and friends to your grandfather's 75th birthday celebration.
- Q2. Draft a formal invitation card for the inauguration of a new gym and fitness centre in your locality.
- Q3. You are the secretary of a community centre. Draft a formal invitation card for the inauguration of a public library.
- Q4. Draft a formal invitation card inviting parents and students to attend a counselling session on studying abroad.
- Q5. Your cousin is getting married in Delhi. Draft a formal invitation card inviting relatives and family friends.

WORKSHEET 2 - NOTICE WRITING

- Q1. You are the President of the Student Council of your school. Draft a notice informing students about a Model United Nations (MUN) conference being organised in collaboration with an international institution.
- Q2. As the Secretary of the Eco Club, draft a notice inviting students to participate in a week-long sustainability campaign including workshops, awareness drives, and plantation activities.
- Q3. Your school is hosting an inter-school symposium on "Artificial Intelligence and Ethics." Draft a notice inviting interested students to register for paper presentations.
- Q4. You are the secretary of a housing society. Draft a notice regarding strict waste segregation rules and penalties for non-compliance.
- Q5. Draft a notice informing residents about increased cases of theft in the locality and precautionary measures suggested by the police.

WORKSHEET 3 – JOB APPLICATION

- Q1. You saw an advertisement for the post of Receptionist at a hotel in Delhi. Draft a formal application with bio-data in response to the advertisement.
- Q2. You are interested in the post of Librarian Assistant at a public library. Draft a job application with bio-data.
- Q3. A coaching institute requires English teachers for senior classes. Write an application for the post mentioning your academic achievements and teaching experience.
- Q4. You are applying for the position of Sales Executive at an electronics company. Write a formal job application with bio-data.
- Q5. An online education platform is hiring subject experts for content creation. Draft an application for the post of English Subject Expert.

HINDI (002)
CLASS XII
WORKSHEET 1

ग्रीष्मावकाश गृहकार्य

निर्देश

- सभी प्रश्नों के उत्तर सुंदर एवं स्पष्ट लिखावट में लिखें।
- कार्य समय पर पूर्ण करें।
- अवकाश के बाद गृहकार्य जमा करवाना अनिवार्य है।
- वर्कशीट 1-4 का सारा कार्य अपनी कार्यपुस्तिका में कीजिए।

प्रश्न 1. निम्नलिखित गद्यांश को पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए ।

“समय मानव जीवन की सबसे मूल्यवान संपत्ति है। जो व्यक्ति समय का सदुपयोग करना सीख लेता है, वह जीवन में सफलता अवश्य प्राप्त करता है। विद्यार्थी जीवन में समय का विशेष महत्व होता है क्योंकि यही समय भविष्य की नींव तैयार करता है। जो विद्यार्थी नियमित रूप से अध्ययन करते हैं, वे परीक्षा में अच्छे अंक प्राप्त करते हैं तथा आत्मविश्वास से भर जाते हैं। दूसरी ओर, जो विद्यार्थी समय नष्ट करते हैं, वे बाद में पछताते हैं।

आज के युग में मोबाइल फोन और सोशल मीडिया विद्यार्थियों का बहुत समय नष्ट कर रहे हैं। विद्यार्थी पढ़ाई की बजाय घंटों मनोरंजन में व्यस्त रहते हैं, जिससे उनकी एकाग्रता कम हो जाती है। समय का सही प्रबंधन जीवन को अनुशासित बनाता है। हमें अपने प्रत्येक कार्य के लिए निश्चित समय निर्धारित करना चाहिए। समय कभी किसी की प्रतीक्षा नहीं करता, इसलिए प्रत्येक व्यक्ति को समय का महत्व समझते हुए उसका सदुपयोग करना चाहिए। सफल व्यक्ति वही होता है जो समय के साथ चलना जानता है।”

प्रश्न(क) निम्नलिखित प्रश्नों को पढ़कर सही उत्तर लिखिए।

1. विद्यार्थी जीवन में किसका विशेष महत्व बताया गया है?
2. विद्यार्थियों का समय किस कारण अधिक नष्ट हो रहा है?
3. सफल व्यक्ति किसे कहा गया है?

(ख) विद्यार्थी जीवन में समय का सदुपयोग क्यों आवश्यक है?

सोशल मीडिया विद्यार्थियों की एकाग्रता को कैसे प्रभावित करता है?

(ग) राहुल परीक्षा के समय भी अधिकतर समय मोबाइल पर बिताता है, जिसके कारण उसके अंक कम आ गए। गद्यांश के आधार पर बताइए कि राहुल को क्या सुधार करना चाहिए?

(घ) समय का सही प्रबंधन जीवन को कैसा बनाता है?

गद्यांश का उचित शीर्षक लिखिए।

(ङ) 'एकाग्रता' शब्द का अर्थ लिखिए।

WORKSHEET 2

प्रश्न 1. निम्नलिखित कविता के अंश को ध्यानपूर्वक पढ़कर पूछे गए प्रश्नों के उत्तर दीजिए-

काव्यांश

“उठो धरा के अमर सपूतो,
पुनः नया निर्माण करो।
जन-जन के जीवन में फिर से
नव उत्साह का संचार करो।
अंधकार से घिरे हुए पथ
ज्ञान-ज्योति से प्रकाशित हों,
मानवता के सूखे उपवन
प्रेम-सुधा से सिंचित हों।
मेहनत, साहस और लगन से
हर बाधा को पार करो,
उठो युवा अब देश हेतु तुम
जीवन अपना सार्थक करो।”

प्रश्न(क) कवि किसे संबोधित कर रहा है?

‘ज्ञान-ज्योति’ का अर्थ क्या है?

कविता में किसके माध्यम से बाधाओं को पार करने की बात कही गई है?

(ख) कवि ने ‘नया निर्माण’ करने की प्रेरणा क्यों दी है?

मानवता के उपवन को ‘प्रेम-सुधा’ से सिंचित करने का क्या आशय है?

(ग) यदि विद्यालय के विद्यार्थी मिलकर स्वच्छता अभियान चलाएँ, तो यह कविता उन्हें किस प्रकार प्रेरित करती है?

(घ) कविता का मुख्य संदेश लिखिए।

(ङ) कविता में युवाओं से क्या अपेक्षा की गई है?

‘अंधकार से घिरे हुए पथ’ पंक्ति का भाव स्पष्ट कीजिए।

WORKSHEET 3

अंतरा भाग – 2

गद्य पाठ – “प्रेमघन की छाया स्मृति”

प्रश्न 1. लेखक परिचय लिखिए।

प्रश्न 2. पाठ का सारांश अपने शब्दों में लिखिए।

प्रश्न 3. प्रेमघन के व्यक्तित्व की विशेषताएँ लिखिए।

अंतरा भाग – 2

कविता – “सरोज स्मृति”

कवि परिचय – सूर्यकांत त्रिपाठी निराला

प्रश्न 1. कविता का भावार्थ लिखिए।

प्रश्न 2. कविता में व्यक्त पिता की वेदना को स्पष्ट कीजिए।

प्रश्न 3. कविता से पाँच अलंकार छाँटकर लिखिए।

निम्न प्रश्नों के उत्तर दीजिए –

1. 'सरोज स्मृति' को शोकगीत क्यों कहा जाता है?
2. कविता की भाषा-शैली की विशेषताएँ लिखिए।
3. कवि की पीड़ा किस रूप में व्यक्त हुई है?

WORKSHEET 4

अभिव्यक्ति और माध्यम

पाठ – 2 : पत्रकारिता लेखन

प्रश्न 1. पत्रकारिता लेखन की विशेषताएँ लिखिए।

2. समाचार लेखन और फीचर लेखन में अंतर स्पष्ट कीजिए।

3. अपने विद्यालय के वार्षिकोत्सव पर समाचार लेख लिखिए।

प्रश्न 2. निम्न विषयों पर 150–200 शब्दों का लेख लिखिए –

1. सोशल मीडिया का प्रभाव

2. पर्यावरण संरक्षण

प्रश्न 3. किसी सामाजिक विषय पर एक आकर्षक फीचर लेख तैयार कीजिए।

WORKSHEET 5

परियोजना कार्य

निम्नलिखित में से कोई दो प्रोजेक्ट तैयार कीजिए –

1. आधुनिक हिंदी कविता की विशेषताएँ
2. हिंदी पत्रकारिता का विकास
3. सूर्यकांत त्रिपाठी निराला का साहित्यिक योगदान
4. भारतीय संस्कृति और लोक साहित्य
5. मीडिया और हिंदी भाषा का संबंध

प्रोजेक्ट निर्देश-

- प्रोजेक्ट हस्तलिखित होना चाहिए।
- प्रत्येक प्रोजेक्ट 10-12 पृष्ठों का हो।
- चित्र, चार्ट एवं सजावट का प्रयोग करें।
- विषय सूची, प्रस्तावना एवं निष्कर्ष अवश्य जोड़ें।
- कार्य A4 शीट/फाइल में करें।

PUNJABI (104)

CLASS XII

ਪਿਆਰੇ ਵਿਦਿਆਰਥੀਓ,

ਗਰਮੀਆਂ ਦੀਆਂ ਛੁੱਟੀਆਂ ਆਰਾਮ ਕਰਨ, ਨਵੀਆਂ ਗੱਲਾਂ ਸਿੱਖਣ ਅਤੇ ਆਪਣੀ ਰਚਨਾਤਮਕਤਾ ਨੂੰ ਨਿਖਾਰਣ ਦਾ ਸੁੰਦਰ ਸਮਾਂ ਹੁੰਦੀਆਂ ਹਨ। ਤੁਹਾਡਾ ਹਾਲੀਡੇ ਹੋਮਵਰਕ ਇਸ ਤਰ੍ਹਾਂ ਤਿਆਰ ਕੀਤਾ ਗਿਆ ਹੈ ਕਿ ਤੁਸੀਂ ਆਪਣੀ ਪੜ੍ਹਾਈ ਦੀ ਦੁਹਰਾਈ ਵੀ ਕਰ ਸਕੋ ਅਤੇ ਨਵੀਆਂ ਚੀਜ਼ਾਂ ਵੀ ਸਿੱਖ ਸਕੋ। ਆਪਣਾ ਕੰਮ ਸਾਫ਼-ਸੁਥਰੇ ਅਤੇ ਸਮੇਂ ਸਿਰ ਪੂਰਾ ਕਰੋ। ਛੁੱਟੀਆਂ ਦੌਰਾਨ ਕਿਤਾਬਾਂ ਪੜ੍ਹੋ, ਮਾਪਿਆਂ ਦੀ ਸਹਾਇਤਾ ਕਰੋ ਅਤੇ ਪਰਿਵਾਰ ਨਾਲ ਚੰਗਾ ਸਮਾਂ ਬਿਤਾਓ।

“ਸਿੱਖਣਾ ਕਦੇ ਨਹੀਂ ਰੁੱਕਦਾ – ਛੁੱਟੀਆਂ ਵੀ ਗਿਆਨ ਅਤੇ ਰਚਨਾਤਮਕਤਾ ਦੀ ਸੋਹਣੀ ਯਾਤਰਾ ਬਣ ਸਕਦੀਆਂ ਹਨ।”

ਤੁਹਾਨੂੰ ਖੁਸ਼ਹਾਲ, ਸੁਰੱਖਿਅਤ ਅਤੇ ਲਾਭਦਾਇਕ ਛੁੱਟੀਆਂ ਦੀਆਂ ਸੁਭਕਾਮਨਾਵਾਂ। ❀

ਹੇਠ ਦਿੱਤਾ ਸਾਰਾ ਕੰਮ ਜਮਾਤ ਦੀ ਕਾਪੀ ਵਿੱਚ ਹੀ ਕੀਤਾ ਜਾਵੇ -

ਪ੍ਰਸ਼ਨ 1. ਹੇਠ ਲਿਖਿਆਂ ਵਿੱਚੋਂ ਕੋਈ ਦੋ ਲੇਖ ਲਿਖੋ (ਲਗਭਗ 250 ਸ਼ਬਦਾਂ ਵਿੱਚ) -

ਪੰਜਾਬ ਦੇ ਲੋਕ ਨਾਚ , ਰੁੱਖਾਂ ਦੀ ਮਹੱਤਤਾ , ਆਨਲਾਈਨ ਸਿੱਖਿਆ

ਪ੍ਰਸ਼ਨ 2. ਹੇਠ ਲਿਖੇ ਅਖਾਣਾਂ ਨੂੰ ਵਾਕਾਂ ਵਿੱਚ ਵਰਤੋਂ :-

- i . ਉਠੋ ਤਾਂ ਉਠੋ ਨਹੀਂ ਤਾਂ ਰੇਤ ਦੀ ਮੁੱਠ -
- ii . ਅਸ਼ਰਫੀਆਂ ਦੀ ਲੁੱਟ ਤੇ ਕੋਲਿਆਂ ਤੇ ਮੋਹਰਾਂ -
- iii. ਅੱਗੇ ਸੱਪ ਤੇ ਪਿੱਛੇ ਸ਼ੀਹ-
- iv. ਆਦਰ ਤੇਰੀ ਚਾਦਰ ਨੂੰ ਬਹਿਣਾ ਤੇਰੇ ਗਹਿਣੇ ਨੂੰ -
- v. ਆਪੇ ਫਾਥੜੀਏ ਤੈਨੂੰ ਕੇਣ ਛਡਾਏ -
- vi. ਆਪੇ ਮੈਂ ਰੱਜੀ ਪੁੱਜੀ ਆਪੇ ਮੇਰੇ ਬੱਚੇ ਜੀਣ -
- vii. ਆਪਣੇ ਹੱਥੀਂ ਆਪਣਾ ਆਪੇ ਹੀ ਕਾਜ ਸਵਰੀਏ -
- viii. ਆਰੀ ਨੂੰ ਇੱਕ ਪਾਸੇ ਦੰਦੇ ਜਹਾਨ ਨੂੰ ਦੋਹੀਂ ਪਾਸੀ -
- ix. ਇੱਕ ਚੁੱਪ ਤੇ ਸੋ ਸੁੱਖ -
- X. ਸੱਚੇ ਮਾਰਗ ਚੱਲਦਿਆਂ ਉਸਤਤ ਕਰੇ ਜਹਾਨ

ਪ੍ਰਸ਼ਨ -3 ਤੁਹਾਡੇ ਸਕੂਲ ਵਿੱਚ ਸਰਕਾਰ ਵੱਲੋਂ ਵਿੱਦਿਆਰਥੀਆਂ ਦੀ ਯੂਨੀਫਾਰਮ ਖਰੀਦਣ ਲਈ ਗ੍ਰਾਂਟ ਆਈ ਹੈ | ਵੇਰਵੇ ਦੱਸਦੇ

ਹੋਏ ਸਕੂਲ ਦੇ ਪ੍ਰਿੰਸੀਪਲ ਸਾਹਿਬ ਵੱਲੋਂ ਕਿਸੇ ਫਰਮ ਤੋਂ ਕੁਟੇਸ਼ਨ ਦੀ ਮੰਗ ਕਰੋ ।

ਪ੍ਰਸ਼ਨ -4 ਪਾਠ -ਪੁਸਤਕ ਦੇ ਆਧਾਰ ਤੇ ਹੇਠ ਲਿਖੇ ਪ੍ਰਸ਼ਨਾਂ ਦੇ ਉੱਤਰ ਲਿਖੋ -

i . ਪ੍ਰੋ. ਮੋਹਨ ਸਿੰਘ ਦੀ ਕਵਿਤਾ ਦਾ ਸਾਰ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ ।

ii . ਸਾਂਝ ਕਹਾਣੀ ਦਾ ਵਿਸ਼ਾ - ਵਸਤੂ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ ।

iii . ਦੇਵੀ ਮਾਤਾ ਦੇ ਮੇਲਿਆਂ ਦਾ ਕੀ ਪਿਛੋਕੜ ਹੈ ? ਦੇਵੀ ਮਾਤਾ ਨਾਲ ਸੰਬੰਧਿਤ ਕਿਸੇ ਇੱਕ ਮੇਲੇ ਦਾ ਵਰਣਨ ਕਰੋ ।

iv. ਗੁਰੂ ਸਾਹਿਬਾਂ ਦੀ ਸਿਮਰਤੀ ਵਿੱਚ ਪੰਜਾਬ ਵਿੱਚ ਕਿਹੜੇ -ਕਿਹੜੇ ਮੇਲੇ ਲੱਗਦੇ ਹਨ ? ਕਿਸੇ ਇੱਕ ਬਾਰੇ ਜਾਣਕਾਰੀ ਦਿਓ ।

ਪ੍ਰਸ਼ਨ -5 ਸੀ.ਬੀ.ਐੱਸ.ਸੀ ਵੱਲੋਂ ਜਮਾਤ 9ਵੀਂ ਲਈ ਕੀਤੇ ਗਏ ਤਿੰਨ ਭਾਸ਼ਾਈ ਫਾਰਮੁੱਲੇ ਬਾਰੇ ਆਪਣੇ ਵਿਚਾਰ ਪੇਸ਼ ਕਰੋ ।

ਪ੍ਰਸ਼ਨ -6 ਗਰਮੀ ਦੀ ਛੁੱਟੀਆਂ ਵਿੱਚ ਆਪਣੇ ਘਰ ਦੇ ਬਜ਼ੁਰਗਾਂ ਨਾਲ ਜਾਂ ਬਜ਼ੁਰਗ ਰਿਸ਼ਤੇਦਾਰਾਂ ਨਾਲ ਕੁਝ ਸਮਾਂ ਬਤੀਤ ਕਰੋ।

ਉਹਨਾਂ ਨਾਲ ਆਪਣਾ ਅਨੁਭਵ ਲਗਭਗ 100 ਸ਼ਬਦਾਂ ਵਿੱਚ ਸਾਂਝਿਆਂ ਕਰੋ (ਪੰਜਾਬੀ ਟਾਈਪ ਕਰਦੇ ਹੋਏ) ਅਤੇ

ਨਾਲ ਹੀ 2-3 ਫੋਟੋਆਂ ਵੀ ਇਨਸਰਟ ਕਰੋ ।

ਪ੍ਰਸ਼ਨ -7 ਪਾਠ ਪੁਸਤਕ ਵਿੱਚੋਂ ਕਿਸੇ ਇੱਕ ਕਵਿਤਾ ਦੇ ਦੋ ਪੈਰੇ ਲਿਖੋ ਨਾਲ ਹੀ ਦੋ ਫੋਟੋਆਂ ਇੰਸਰਟ ਕਰਦੇ ਹੋਏ ਪ੍ਰਿੰਟ ਤਿਆਰ ਕਰੋ.

ਪ੍ਰਸ਼ਨ - 8 ਕਹਾਣੀ ' ਨੀਲੀ ' ਪੜ੍ਹੋ ਅਤੇ ਉਸ ਦੇ ਪਾਤਰਾਂ ਨਾਲ ਜਾਣ - ਪਛਾਣ ਕਰਵਾਓ ।

POLITICAL SCIENCE(028)

CLASS XII

Dear Students,

Welcome to your summer vacation! Class 12 is a defining milestone in your academic journey, offering a wonderful opportunity to develop a deeper, more analytical perspective on world affairs.

Political Science is not a subject confined to memory; it is a lens through which we understand power, conflict, and peace across the globe. This holiday homework is curated to bridge your textbook concepts with critical thinking. As you explore the dramatic collapse of superpowers and the rewriting of global maps, remember that understanding history is the only way to make sense of our turbulent present.

Guidelines for Your Assignment:

- **Presentation: Maintain a neat, dedicated assignment folder or use your political science notebook. Use clear headings for sections.**
- **Analytical Writing: Avoid copying text word-for-word. Focus on crisp, structured point-wise answers that directly address the question.**
- **Timely Submission: Ensure your completed worksheet is ready for review on the day the school reopens.**

Stay safe, read the newspapers, and have a wonderfully productive break!

Worksheet: Political Science (Class 12)

Book: Contemporary World Politics

Chapter 1: The End of Bipolarity

Section A: Objective & Very Short Answer Questions (1 Mark Each)

Q1. What did the dramatic fall of the Berlin Wall in November 1989 symbolize in contemporary world history?

Q2. Identify the dynamic Soviet leader who introduced the twin reform policies of *Perestroika* and *Glasnost*.

Q3. Define the term "Shock Therapy" in the context of post-communist transition.

Q4. In December 1991, under the leadership of Boris Yeltsin, which three core republics declared that the Soviet Union was disbanded?

Q5. State the primary objective behind the establishment of the Commonwealth of Independent States (CIS).

Section B: Short Answer Questions (2 Marks Each)

Q6. Explain the basic economic and political features that defined the Soviet System before its decline in the late 1970s.

Q7. Highlight any two major consequences that the collapse of the Second World had on global military alliances and international power equations.

Q8. "The transition from an authoritarian socialist system to a democratic capitalist system was not smooth." Give two pieces of evidence from Russia or Central Asia to support this.

Section C: Long Answer Questions (4 Marks Each)

Q9. Examine the domestic factors and internal political weaknesses that led to the sudden disintegration of the USSR. Why did Gorbachev's reforms fail to save it?

Q10. What was the nature of "Shock Therapy" administered by the World Bank and IMF? Analyze its devastating consequences on the Russian economy and social welfare system.

Q11. Discuss the ethnic conflicts and civil wars that erupted in the former Soviet republics post-disintegration, with special focus on the Balkans and Central Asia.

Section D: Competency & Long-Form Analysis (6 Marks Each)

Q12. Comprehensive Essay Evaluation:

Analyze India's changing relationship with post-communist Russia. Your answer must critically address the following dimensions:

- The historical legacy of Indo-Soviet ties during the Cold War.

- Shared geopolitical visions, including the concept of a "Multipolar World Order."
- Strategic, defense, and energy cooperation between New Delhi and Moscow in the modern era.

Q13. Map, Picture & Analytical Project Activity:

- Part A (World Map Work): On an outline map of the world, locate, shade, and label the following:
 1. The country that was considered the leader of the Warsaw Pact.
 2. Two former Soviet Republics that share an active border with Western Europe.
 3. A Central Asian republic that experienced a prolonged civil war for ten years until 2001.
- Part B (Contemporary Application Media Diary): Collect two news articles or editorials from national newspapers regarding current geopolitical tensions in Eastern Europe or Central Asia. Write a short 200-word reflective note on how these current conflicts trace their historical roots back to the disintegration of the Soviet Union in 1991.

INFORMATICS PRACTICES (065)

CLASS XII

Holidays Home Work

Dear Students,

As discussed and explained in the class, you are required to prepare a **Program File** using **MS Word** during the holidays.

The document should contain:

• **Series Topic**

- 10 to 15 questions

• **DataFrame Topic**

- 15 questions

Process to be Followed:

1. Write all the questions properly in the MS Word document.
2. Perform all the practicals in Python software.
3. Take screenshots of:
 - Python program/code
 - Answers/results
 - Outputs
4. Paste all the screenshots below the respective questions in the Word document.
5. Ensure that the document is neat, properly arranged, and well-formatted.

Submission Instructions:

After completing the Holiday Homework, send the MS Word file to: mahairinky@gmail.com

Please complete and submit your work on time.

Commercial Art (052)

CLASS XII

Session 2026–27

Portfolio Submission Date: 6TH July 2026

Size: A2 Sized White Ivory Sheets

Total Sheets to be Submitted: 22 Sheets

Instructions for Students

- **All work must be done neatly on A2 size white sheets.**
- **Use proper colouring, composition, shading, and creativity.**
- **Write your Name and Class, Section on the back side of each sheet.**
- **Maintain a separate portfolio folder for submission.**

Use suitable mediums such as pencil colours, poster colours, watercolours, oil pastels, or sketch pens wherever required.

Black & White work should be neat and properly shaded.

Portfolio Work Distribution (22 Sheets)

1. Still Life – 4 Sheets

(Pencil Shading & Colourful Composition)

Create any four still life compositions using objects such as:

Fruits and bottles

Flower vase

Kitchen utensils

Books and lamp

Earthen pots

Medium:

2 sheets in pencil shading

2 sheets in color

2. Landscape Painting – 2 Sheets

(Colourful)

Create colorful landscape compositions based on:

Sunrise or sunset

Nature scenery

Mountains and river

Village landscape

3. Folk Art – 3 Sheets

(Colourful Traditional Art)

Make any three folk art paintings:

Madhubani Art

Warli Art

Gond Art

Kalamkari

Pattachitra

4. Illustration – 4 Sheet

Create one creative illustration based on any theme:

Festival celebration

Environment awareness

School life

Imagination scene

5. Figure Drawing – 2 Sheets

(Black & White)

Create human figure compositions on the following topics:

Market Scene

Drawing Room Scene

Family Scene

Garden Scene

Sports Activity

Medium:

Pencil / Charcoal / Black ink only

6. Outdoor & Daily Life Scenes – 3 Sheets

Draw and colour any three scenes from the following:

Children playing in park

Football match

Village scene

Tea stall

Bus stand

7. Poster Making – 4 Sheets

Create four attractive posters with slogans and proper color combinations on the following themes:

Save Water

Save Earth

Save Electricity

Say No to Plastic

Additional Poster Themes (Practice Work)

Students may additionally practice poster making on:

Women Empowerment

Advertisement Design

Indian Tourism

Global Warming

- **Submission Guidelines**
- **Portfolio must contain all 22 sheets properly arranged.**
- **Incomplete work will not be accepted.**
- **Creativity, neatness, coloring, and originality will be considered for assessment.**
- **Submit the complete portfolio by 06TH July 2026 without fail.**
- **Holiday Homework should be prepared in proper format as instructed**
- **Maintain neat presentation and proper labelling.**

Fine Arts / Commercial Art

Topic: Rajasthani School of Miniature Painting

Class: XII

Session: 2026–27

Q1. Short Answer Questions

Answer the following questions in about 40–50 words each:

- 1. Describe the origin of the Rajasthan School of Miniature Painting.**
- 2. Why is Bani Thani called the “Indian Mona Lisa”?**
- 3. Name any three famous painters of the Rajasthan School.**

4. What were the main themes of Rajasthani paintings?
5. Explain the characteristics of the Kishangarh School.
6. Write a short note on the Mewar School.
7. What is meant by Ragamala painting?
8. What influence did Mughal School of Painting have on Rajasthan miniature painting?

Q2. Long Answer Questions

Answer the following questions in about 100–150 words each:

1. Explain the development of the Rajasthan School of Miniature Painting in detail.
2. Evaluate the aesthetic qualities of Maru Ragini.
3. Compare the Mughal School of Painting and the Rajasthan School of Painting.
4. Explain the role of Rajput rulers in the growth of miniature painting in Rajasthan.

Q3. Very Short Answer Questions

Answer the following in one sentence:

- a. Which school is famous for romantic style paintings?
- b. Which painting style is known for bright colours and decorative beauty?
- c. What was the main subject of Jain School paintings?
- d. Name any two centres of Rajasthan miniature painting.

Instructions:

- Write all answers neatly in your holiday homework notebook/file.
- Use proper headings and subheadings.
- Draw and colour one miniature painting related to Rajasthan School on an A4/A3 sheet.

PHYSICAL EDUCATION (048)

CLASS – XII

WORKSHEET 1

Section A: Multiple Choice Questions (1 Mark Each)

Q1. 1. Which of the following is not a function of sports event management?

- a) Planning
- b) Cooking
- c) Staffing
- d) Controlling

Q2. In which type of fixture do teams get eliminated after losing once?

- a) League
- b) Knock-Out
- c) Round Robin
- d) Cyclic

Q3. The committee responsible for arranging medals and certificates is:

- a) Finance Committee
- b) Reception Committee
- c) Prize Distribution Committee
- d) Publicity Committee

Q4. The main objective of intramural sports is:

- a) Selecting national players
- b) Promoting international exposure
- c) Developing sportsmanship within the institution
- d) Promoting commercial sponsorship

Q5. Which of the following is a benefit of community sports?

- a) Academic promotion
- b) Cultural exchange
- c) Social bonding and better health
- d) Examination coaching

Section B: Very Short Answer Questions (2 Marks Each)

Q1. Define seeding in a knock-out tournament.

Q2. What do you understand by intramural sports?

Q3. List two responsibilities of the Publicity Committee.

Q4. Write any two purposes of community sports

Q4. Amenorrhea is defined as:

- a) Bone thinning
- b) Loss of appetite
- c) Absence of menstruation
- d) Muscle cramps

Q5. Which condition involves low energy availability, loss of periods, and bone issues in athletes?

- a) Menstrual syndrome
- b) Iron deficiency
- c) Female athlete triad
- d) Anaerobic syndrome

Section B: Very Short Answer Questions (2 Marks Each)

Q6. What is menarche and at what average age does it occur?

Q7. Name any two social benefits of women's participation in sports. Q8. What is osteoporosis?

Q9. Mention any two causes of menstrual dysfunction in female athletes

Section C: Short Answer Questions (3 Marks Each)

Q10. List any three physical benefits which women gain from participation in physical activities.

Q11. Briefly describe the three components of the female athlete triad.

Q12. What psychological challenges may female athletes face due to menstrual irregularities?

Section D: Case Study (4 Marks Each)

Q13. Case Study:

Anita, a 17-year-old national-level gymnast, reports fatigue, irregular periods, and a recent stress fracture. She eats very little to maintain a "slim" figure. Her coach is concerned about her declining performance and health.

Questions:

- a) Identify the possible condition Anita is experiencing.
- b) List the three major symptoms she is showing.
- c) Suggest any two measures to manage or treat this condition.
- d) Why is it important for coaches to be educated about this condition?

Section E: Long Answer Questions (5 Marks Each)

Q14. Explain the importance of sports participation for women under physical, psychological, and social aspects.

Q15. Describe the female athlete triad in detail. Include causes, symptoms, and preventive measures.

Q16. Describe any five asanas that help prevent or manage arthritis and back pain. Include their procedure, benefits, and contraindications.

Prepare a Record File Practical 1:-

1. Fitness tests Administration (SAI Khelo India Test) Practical
2. Anyone IOA recognized sports/Game of choice. Labelled diagram of Field & Equipment. Also mention its Rules, Terminologies & Skill Note :-
3. Both the practical's need to be maintained in the Lab Manual of Physical education.

HINDUSTANI MUSIC VOCAL (034)

CLASS XII

❖ WORKSHEET:

Q1. Explain the salient features and formatting styles found in the ancient musical treatise Sangeet Ratnakar.

Q2. Write the details of Tala 'Rupak'. Provide the Thah (Ekgun), Dugun, and Chaugun laya formats in proper tabular layouts.

❖ PROJECT WORK :

- Write short biographies of the musician “Ustad Faiyaz Khan”.
- Explain the technical structure of the following Ragas:
- (a) Raga Bhairav (b) Raga Malkauns
- Write the notation (Theka) of the following Talas along with their Dugun :

(a) Dhamar

(b) Jhaptal

(c) Rupak