THE ASIAN SCHOOL, DEHRADUN

HOLIDAY HOMEWORK - SUMMER VACATION 2017 FOR CLASS XII

English:

PART- A

Note : To be done in Homework Notebooks.

Long Answer Type Questions (To be answered in 150 words each)

Q1. The story "The Last Lesson" is all about "Linguistic Chauvinism" Comment.

Q2. What did the French teacher tell his students in the last French Lesson? What impact did it have on them? Why?

Q3. Would you agree that promises made to poor children are rarely kept? How do the incidents narrated in the text explain them properly in your own language?

Q4. What thoughts does Kamala Das put away while travelling with her mother in the car? Why do you think she puts them away?

Q5. The story "The Tiger King" is a satire one the conceit of those in power. How does the author employ the literary device of dramatic irony in the story?

PART- B

Value Based Questions: (To be Answered in 150 words)

Q6. How did procrastination in learning French Cost the French people dearly? How can the vice of procrastination be overcome?

Q7. Do you relate to Franz and his habit of evading school work? Do you find his sincerity towards the end to be authentic? Based on your understanding of the behaviour of young children, assess the character of Franz and list the values that you can learn from him.

Q8. If we all take a pledge to listen to the voice of our conscience, the vice of child labour and exploitation would be easily eradicated from our society. Comment in 150 words.

PART- C

Read 6 Chapters of the Novel.

Q9. "The Invisible Man" By H.G. Wells and write Review of these chapters.

Hindi : 1. नारी–सशक्तिकरण विषय पर लगभग 300 शब्दों में एक निबन्ध लिखिए।

2. किसी पर्यटन स्थल के होटल के प्रबंधक को निर्धारित तिथियों पर होटल के दो कमरे आरक्षित करने का अनुरोध करते हुए पत्र लिखिए। पत्र में उन्हें कारण भी बताइए कि आपने उनका होटल क्यों चुना?

3. वन रहेंगें– हम रहेंगें विषय पर एक फीचर लिखिए।

4. बेमेल–विवाद विषय पर एक आलेख लिखिए।

5. आत्मपरिचय, पतंग, भक्तिन, बाजार दर्शन, कविता के बहाने बात सीधी थी पर के प्रश्न–उत्तरों को अपनी गृहकार्य कॉपी में करे।

Mathematics:

Q1. If $A^{-1} = \begin{bmatrix} 3 & -1 & 1 \\ -15 & 6 & -5 \\ 5 & -2 & 2 \end{bmatrix}$ and $B = \begin{bmatrix} 1 & 3 & 2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}$ find AB^{-1}

Q2. Solve the following system of equation using matrix method :

$\frac{2}{x} + \frac{3}{y} + \frac{10}{z} = 4,\ \frac{4}{x} - \frac{6}{y} + \frac{5}{z} = 1,\ \frac{6}{x} + \frac{9}{y} - \frac{20}{z} = 2$

Q3. Find the inverse of the following matrix using elementary operations $A = \begin{bmatrix} 1 & 2 & -2 \\ -1 & 3 & 0 \\ 0 & -2 & 1 \end{bmatrix}$

Q4. Using properties of determinants prove that : $\begin{vmatrix} a & a+b & a+b+c \\ 2a & 3a+2b & 4a+3b+2c \\ 3a & 6a+3b & 10a+6b+3c \end{vmatrix} = a^3$

Q5. In a Δ ABC, if $\begin{vmatrix} 1 & 1 & 1 \\ 1+sinA & 1+sinB & 1+sinC \\ sinA+sin^2A & sinB+sin^2B & sinC+sin^2C \end{vmatrix} = 0$

then prove that Δ ABC is an isosceles Δ.

Q6. If $A = \begin{bmatrix} 2 & 0 & -1 \\ 5 & 1 & 0 \\ 0 & 1 & 3 \end{bmatrix}$ Prove that $A^{-1} = A^2 - 6A + 11I$.

Q7.For what value of K, do the equations 2x- 3y+2z = a, 5x + 4y - 2z = -3, x -13y +kZ= 9, not have a unique solution?

Q8. If $A = \begin{bmatrix} 3 & -2 & 1 \\ 2 & 1 & -3 \\ -1 & 2 & 1 \end{bmatrix}$ find A^{-1} and use it to solve the following equations 3x-2y+z= 2, 2x+y-3z= -5, -x+2y +z = 6.

Q9. Prove that if A is a skew symmetric matrix of odd order n then $|A| = 0$.

Q10. If A (x_1y_1), B (x_2y_2) and C (x_3y_3) are vertices of an equilateral Δ whose each side is equal to 'a' then prove that $\begin{vmatrix} x_1 & y_1 & 2 \\ x_2 & y_2 & 2 \\ x_3 & y_3 & 2 \end{vmatrix} = 3a^4$

Q11. Show that $\tan\left(\frac{1}{2} sin^{-1}\frac{3}{4}\right) = \frac{4-\sqrt{7}}{3}$

Q12. Prove that $Cot^{-1}\left(\frac{\sqrt{1+sinx}+\sqrt{1-sinx}}{\sqrt{1+sinx}+\sqrt{1-sinx}}\right) = \frac{x}{2}, x \in \left(0, \frac{\pi}{4}\right)$

Q13. Prove that $\tan^{-1}x + \tan^{-1}\left(\frac{2x}{1+x^2}\right) = \tan^{-1}\left(\frac{3x-x^3}{1-3x^2}\right)$

Q14 If $\sin^{-1}x + \sin^{-1}y + \sin^{-1}z = \pi$ Prove that $x\sqrt{1-x^2} + y\sqrt{1-y^2} + z\sqrt{1-z^2} = 2xyz$.

Q15. Prove that $\sec^2(\tan^{-1}2) + \operatorname{cosec}^2(Cot^{-1}3) = 15$

Q16 Prove that $\sin^{-1}\frac{4}{5} + \sin^{-1}\frac{5}{13} + \sin^{-1}\frac{16}{65} = \frac{\pi}{2}$

Q17. Evaluate $\tan\left\{2tan^{-1}\frac{1}{5} - \frac{\pi}{4}\right\}$

Q18. Solve the following equations $2\tan^{-1}(\cos x) = \tan^{-1}(2\operatorname{cosec} x)$

Q19. Solve the following equation $\sin^{-1}(1-x) - 2\sin^{-1} x = \frac{\pi}{2}$

Q20. Prove that $\cos\left[\tan^{-1}\left\{\sin\left(\cot^{-1}x\right)\right\}\right] = \sqrt{\frac{x^2+1}{x^2+2}}$

Q21. Find the value of K so that f(x) = $\begin{cases} \frac{x^2+3x-10, if\ x}{x-2}, & if\ x \neq 0 \\ K, & if x = 0 \end{cases}$

is continuous at x = 0

Q22. Show that the function f(x) = 2x-|x| is continuous but not differentiable at x = 0.

Q23. If $x^y = e^{x-y}$ then show that $\frac{dy}{dx} = \frac{\log x}{\{\log(xe)\}^2}$

Q24. Differentiate $\tan^{-1}\left[\frac{\sqrt{1+x^2}-1}{x}\right]$ with respect to x.

Q25. If $y = \log\tan\left(\frac{\pi}{4} + \frac{x}{2}\right)$ show that $\frac{dy}{dx} - \sec x = 0$.

Q26. If $y = x^{x\cos x} + \frac{x^2+1}{x^2-1}$, find $\frac{dy}{dx}$

Q27. Using Rolle's theorem, find the points on the curve $y=x^2$ where $x \in [-2,2]$ and the tangent is parallel to x axis.

Q28. Verify Lagrange's mean value theorem for the function $f(x) = x + \frac{1}{x}$ in [1,3]

Q29. If $y = x^x$ prove that $\frac{d^2y}{dx^2} - \frac{1}{y}\left(\frac{dy}{dx}\right)^2 - \frac{y}{x} = 0$

Q30. Differentiate with respect to x.

$\sin^{-1}\left(\frac{2^{x+1}3^x}{1+(36)^x}\right)$

Q31. If $x = \frac{a(1-t^2)}{1+t^2}$, $y = \frac{2bt}{1+t^2}$ find $\frac{dy}{dx}$

Q32. Differentiate $\frac{\cos^x x 2^{x^2} x^2 (x-^3 2x+1)}{(\tan x)(\cos x)e^{x-2})}$

Q33. If $x = a(\theta - \sin\theta)$, $y = a(1-\cos\theta)$, find $\frac{d^2y}{dx^2}$, at $\theta = \pi$

Q34. Find a point on the parabola $y = (x-3)^2$ where the tangent is parallel to the chord joining (3,0) and (4,1)

Q35. Find points on the curve $\frac{x^2}{9} - \frac{y^2}{16} = 1$ at which the tangent are parallel to (i) x axis (ii) y axis.

Q36. If $y = x^3 \log\left(\frac{1}{x}\right)$ Prove that $x\frac{xd^2y}{dx^2} - \frac{2dy}{dx} + 3x^2 = 0$

Q37. Verify mean value theorem for the function f(x) = (x-4) (x-6) (x-8) on the interval [4,10]

Q38. Examine the following function f(x) for continuity at x = 1 and differentiability at x =2.

$$f(x) = \begin{cases} fx-4 & 0 < x < 1 \\ 4x^2 - 3x & 1 \leq x < 2 \\ 3x+4 & x \geq 2 \end{cases}$$

Q39. Prove that : $2\tan^{-1}\left[\frac{\sqrt{a-b}}{a+b}\tan\frac{x}{2}\right] = \cos^{-1}\left(\frac{a\cos x+b}{a+b\cos x}\right)$

Q40.Using the properties of determinants, prove d

$$\begin{vmatrix} 1 & x & x-1 \\ 2x & x(x-1) & x(x+1) \\ 3x(1-x) & x(x-1)(x-2) & x(x+1)(x-1) \end{vmatrix} = 6x^2(1-x^2)$$

Q41. If $A = \begin{bmatrix} 2 & 3 \\ 5 & -2 \end{bmatrix}$ show that $A^{-1} = \frac{1}{19}A$

Q42. Find $\frac{dy}{dx}$ if $(\cos x)^y = (\cos y)^x$

Physics:

Q1. Make a project on :

a) Capacitor b) Metre Bridge c) Potentio Metre d) Moving Coil Galvanometer
e) Magnetic Materials & types of its f) AC current g) Semi conductor and Devices
h) AC and DC generator i) Communication j) Microscope and Telescope k) Nuclear Reactor
l) Transformers m) PNP & NPN Transistors

Q2. Write answers of all these questions in your homework notebook.

UNIT-1 ELECTROSTATICS

CHAPTER--1 ELECTRIC FIELD AND CHARGES

CHAPTER—2 ELECTRIC POTENTIAL AND CAPACITANCE

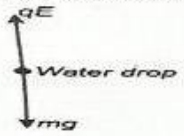
Q1. a) Calculate the charge carried by 12.5×10^{18} electrons.

b) What is the basic difference between force between two masses and the force between two charges?

Q2. Two identical metallic spheres A and B having charges + 4Q and -10Q are kept a certain distance apart. A third distance apart. A third identical uncharged sphere C is first placed in contact with sphere A and then with sphere B. Spheres A and B are then brought in contact and then separated. Find the final charges on the spheres A and B.

Q3. Two identical metal spheres, having unequal opposite charges are placed at a distance 0.90 m part in air. After bringing them in contact with each other, they are again placed at the same distance apart. Now the force of repulsion between them is 0.025 N. Calculate the final charge on each sphere.

Q4. Calculate the electric field strength required just to balanced a water drop of mass 10^{-7} kg and having a charge of $1.6X10^{-19}$ C ($g = 10ms^{-2}$).

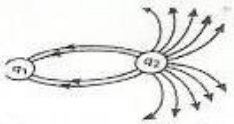


Q5. Why electricity field lines :

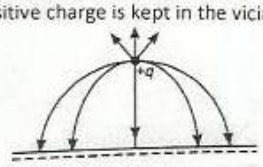
a) can never intersect one another?
b) cannot form closed loops?
c) cannot have break in between?

Q6. In the figure, electric field lines due to point charges q_1 and q_2 are shown.

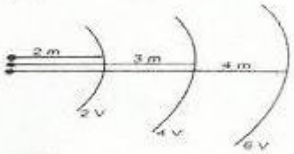
i) What are the signs of charges q_1 and q_2?
ii) What is the ratio of q_1 and q_2?



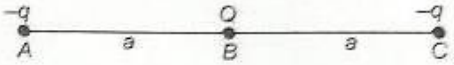
Q7. Sketch the electric field lines, when a positive charge is kept in the vicinity of an uncharged conducting plate.



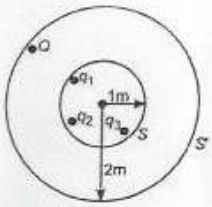
Q8. Calculate the electric field from the equipotential surface shown.



Q9. Three charges – q, Q and – q are placed at equal distances on a straight line. If the potential energy of the system of these charge is zero, then what is the ratio Q: q?

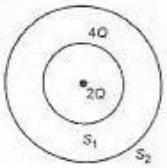


Q10. The flux of the electrostatic field through the closed spherical surface S' is found to be four times that through the closed surface S (figure). Find the magnitude of the charge Q. Given $q_1 = 1\mu C$ and $q_3 = 9.854\mu C$.

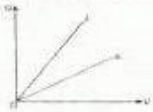


Q11. Consider two hollow concentric spheres S1 and S2 enclosing charges 2Q and 4Q respectively as shown in the figure.

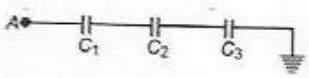
a) Find out the ratio of electric flux through them.
b) How will the electric flux through the sphere S_1 change if a medium of dielectric constant ϵ_r is introduced in the space inside S_1 in place of air? Deduce the necessary expression.



Q12. The graph in the figure shows the variation of charge Q with voltage V for two capacitors K and L. In which capacitor is more electrostatic energy stored?



Q13. Calculate the potential difference the energy stored in the capacitor C_2 in the circuit shown in the figure. Given potential at A is 90 V.



Q14. Net capacitance of three identical capacitors in series is $1\mu F$. What will be their net capacitance if connected in parallel? Find the ratio of energy stored in the two configuration if they are both connected to the same source.

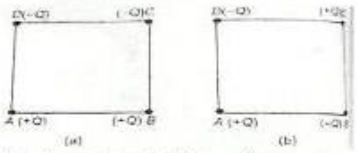
Q15. The equivalence capacitance of the combination between A and B is 4 μF.

a) Calculate the capacitance C.
b) Calculate charge on each capacitor, if a 12 V battery is connected between A and B.
c) What will be the potential drop across each capacitor?

Q16. If E = 3i + 4j - 5k, calculate the electric flux through a surface of area 50 units in Z-X plane.

Q17. Given a uniform electric field $E = 5 \times 10^3\, i\ NC^{-1}$. Find the flux of this field through a square of 10 cm on a side whose plane is parallel to the y-z plane. What would be the flux through the same square if the plane makes a 30^0 angle with the X-axis?

Q18. Four point charges are placed at the four corners of a square in two ways (a) and (b) as shown in figure. Will the (i) electric field (ii) electric potential, at the centre of the square be the same or different in the two configurations and why?



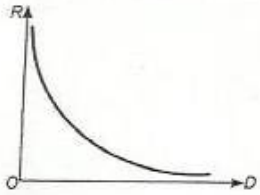
Q19. A parallel plate capacitor is to be designed with a voltage rating I kV using a material of dielectric constant 3 and dielectric strength about 10^7 Vm^{-1}. For safety we would like the field never to exceed say, 10% of the designed strength. What minimum area of the plates is required to have a capacitance of 50F?

Q20. The two plates of a parallel plate capacitor are 4 mm apart. A slab of dielectric constant 3 and thickness 3 mm is introduced between the plates with its faces parallel to them. The distance between the plates is so adjusted that the capacitance of the capacitor becomes $2/3^{rd}$ of its original value. What is the new distance between the plates?

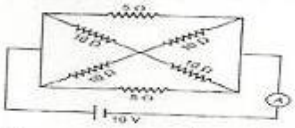
UNIT- 2

- **CHAPTER-3 CURRENT ELECTRICITY**

Q21. Draw a graph of show the variation of resistance R of the metallic wire as a function of its diameter D keeping the other factors constant.



Q22. Calculate the current shown by the ammeter in the circuit shown in figure.

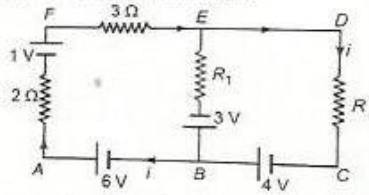


Q23. Nichrome and copper wires of the same length and same diameter are connected in series in an electric circuit. In which wire, the heat by produced at higher rate? Give reason.

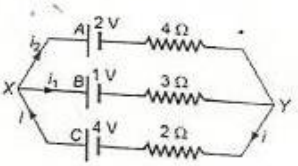
Q24. Two identical cells, each of emf E having negligible internal resistance are connected in parallel with each other across an external resistance R. What is the current through the resistance?

Q25.Two cells each of emf E and internal resistances r1 and r2 are connected in series to an external resistance R. Can a value of R be selected such that the potential difference of the first cell is zero.

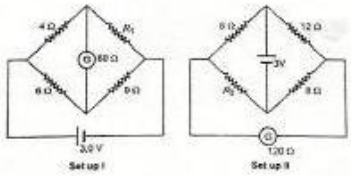
Q26. Use Kirchhoff's rules to determine the potential difference between the points A and D when no current flows in the arm BE of the electric network shown in the figure.



Q27. Three batteries of 2V, 1V and 4V with internal resistances 4Ω, 3 Ω respectively are arranged in parallel. find the current through each battery.

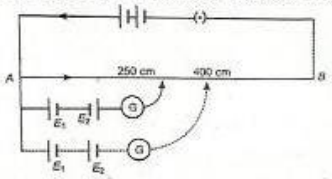


Q28. Figure shows two circuits each having a galvanometer and a battery of 3V. When the galvanometer in each arrangement do not allow any deflection. Obtain the ratio R_1/R_2.

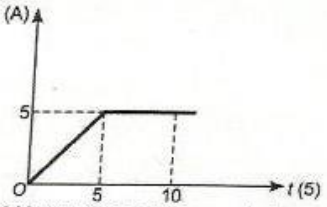


Q29. In a potentiometer arrangement, a cell of emf 1.20V gives a balance point at 30 cm length of the wire. This cell is now replaced by another cell of unknown emf. If the ratio of the emf's of the two cells is 1.5, calculate the difference in the balancing lengths of the potentiometer wire in the two cases.

Q30. Two primary cells of emf E_1 and E_2 ($E_1 > E_2$) are connected to the potentiometer wire as shown in the figure. If the balancing lengths for the two cases are 250 cm and 400 cm. find the ratio of E_1 and E_2.

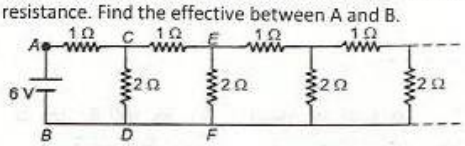


Q31. The plot in figure shows the variation of current I through the cross- section of a wire over a time interval of 10s. Find the charge that flows through the wire over this time period.

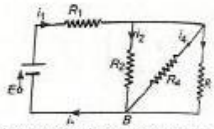


Q32. A resistance R is connected across a cell of emf E and internal resistance r. A potentiometer now measures the potential difference between the terminals of the cell as V. Write the expression for r in terms of E, V and R.

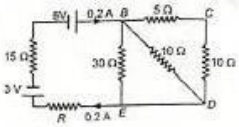
Q33. An infinite ladder net work of resistances is constructed with 1 Ω and 2 Ω resistances shown. A 6 V battery between A and B has negligible resistance. Find the effective between A and B.



Q34. In the circuit shown, $R_1 = 4\ \Omega$, $R_2 = R_3 = 15\ \Omega$ $R_4 = 30\ \Omega$ and E = 10V. Calculate the equivalent resistance of the circuit and the current in each resistor.



Q35. Calculate the value of the resistance R in the circuit shown in the figure so that the current in the circuit is 0.2 A. what would be the potential difference between the points B and E?



Q36. Can a 30W, 6V bulb be connected with supply of 120V? If not, what will have to be done for it?

Chemistry :

- **Prepare a investigatory project on the topic – "Mentioned in CBSE Site."**
- **Write answers of all these questions in your homework notebook.**

Q1. A solid is made up of two elements P and Q. Atoms Q are in ccp arrangement while atoms P occupy all the tetrahedral sites. What is the formula of the compound?

Q2. In chromium (III) chloride, $CrCl_3$. chloride ions have cubic close packed arrangement and Cr (III) ions are present in the octahedral holes. What fraction of the octahedral holes is occupied? What fraction of total number of holes is occupied?

Q3. A solid A^+B^- has NaCl type close packed structure. If the anion has a radius of 250 pm, what should be the ideal radius of the cation? Can a cation C^+ having a radius of 180 pm be slipped into the tetrahedral site of the crystal A^+b^-? Give reason for your answer.

Q4.An element E crystallizes in body centred cubic structure. If the edge length of the cell is $1\text{-}469 \times 10^{-10}$ m and the density is 19.3g cm^{-3}, calculate the atomic radius of this element.

Q5. Calculate the density of silver which crystallizes in a face-centred cubic structure. The distance between the nearest silver atoms in the structure is 287 pm. (Molar Mass of Ag = 107.87 g mol^{-1}, $N_A = 6.02 \times 10^{23}$ mol^{-1})

Q6. Aluminium metal forms a cubic-packed crystal structure. Its atomic radius is 125×10^{-12} m. (a) Calculate the length of the side of the unit cell. (b) How many such cells are there in $1.00 m^3$ of aluminium?

Q7. What is the difference between cubic close packing and hexagonal close packing? Give three examples of elements of each type. What is the coordination number in each case?

Q8. Explain the nature of crystal defect produced when sodium chloride is doped with magnesium chloride.

Q9. Explain superconductivity?

Q10. A solution contains 90g of H_2O,, 6.4 g of methanol and 18.4 g of glycerol. What is the mole fraction of glycerol? (Glycerol = $CH_2OH - CHOH - CH_2OH$)

Q11. Concentrated nitric acid used as laboratory reagent is usually 69% by mass of nitric acid. Calculate the volume of the solution which contains 23g of HNO_3. (The density of the concentrated nitric acid solution is 1.41 g cm^{-3}).

Q12. H_2SO_4 used in lead storage cell is 38% by mass and has a density of 1.30 g cm^{-3}. Calculate its molarity.

Q13. the vapour pressures of benzene and toluene at 293 K are 75 mm and 22 mm Hg respectively. 23.4 g of dbenzene and 64.4g of toluene are mixed. If the two form an ideal solution, calculate the mole fraction of benzene in the vapour phase assuming that the varpour are in equilibrium with the liquid mixture at this temperature.

Q14. Benzene and toluene form nearly ideal solution. At a certain temperature, the vapour pressure of the pure benzene is 150 mm Hg and of pure toluene is 50 mm Hg. For this temperature, calculate the vapour pressure of solution containing equal weights of two substances. Also calculate their composition in the vapour phase.

Q15. A solution of sucrose (molecular mass 342/mol) is prepared by dissolving 68.4 g of it per litre of solution. What is its osmotic pressure at 300 K? (R = 0.082 lit. atm deg^{-1} mol^{-1}).

Q16. At 300 K, 36g of glucose present per litre in its solution has an osmotic pressure of 4.98 bar. If osmotic pressure of the solution is 1.52 bar at the same temperature, what would be its concentration?

Q17. 0.90g of a non electrolyte was dissolved in 87.90g of benzene. This raised the boiling point of benzene by 0.25^0C. If the molar mass of non-electrolyte is 103.0 mol^{-1}, calculate the molal elevation constant for benzene.

Q18. A solution of glycerol ($C_3H_8O_3$), molar mass = 92 g mol^{-1}, in water was prepared by dissolving some glycerol in 500 g of water. This solution has a boiling point of 100.42^0C. What mass of glycerol was dissolved to make this solution? K_b for water = 0.512 mol^{-1}.

Q19. Pure solvent A has freezing point 16.5^0C. On dissolving 0.4 g of B in 200g of A, the solution freezes at 16.4^0C and non dissolving 2.24g of C in 100g of A, the solution has freezing point of 16.0^0C. If the molar mass of B is 74g mol^{-1}, what is the molar mass of C?

Q20. A solution of an organic compound is prepared by dissolving 34.2 g in 500g of water. Calculate the molar mass of the compound and freezing point of the solution. Given that K_b for water = 0.52 K mol^{-1} B. pt of solution = 100.104^0C. K_f for water = 1.87K mol^{-1}.

Q21. Determine the osmotic pressure of a solution prepared by dissolving $2.5x10^{-2}$g of K_2SO_4 in 2L of water at 25^0C, assuming that it is completely dissociated.
(R = 0.0821L atm K^{-1} mol^{-1}, Molar mass of K_2SO_4 = 174 g mol^{-1})

Q22. Phenol associates in benzene to a certain extent to form dimer. A solution containing $2.0X10^{-2}$ kg of phenol in 1.0 kg of benzene has its freezing point decreasing by 0.69K. Calculate the degree of associated of phenol (K_f for benzene = 5.12 kg mol^{-1}).

Q23. Show graphically how the vapour pressure of a solvent and a solution of non volatile solute change with temperature? Show on this graph the boiling points of the solvent and the solution. Which is higher and why?

Q24. How many moles of mercury will be produced by electrolyzing 1.0M $Hg(NO_3)_2$ solution with a current of 2.00 A for 3 hours? [$Hg(NO_3)_2$ = 200.6g $mol._1$]

Q25. How many hours does it take to reduce 3 mol of Fe^{3+} to Fe^{2+} with 2.00 A current? (1 Faraday = 96,500C mol^{-1}, R = 8.314JK^{-1} mol^{-1})

Q26. The resistance of a decinormal solution of an electrolyte in a conductivity cell was found to be 245 ohms. Calculate the equivalent conductivity of the solution if the electrodes in the cell were 2 cm apart and each has an area of 3.5 sq. cm.

Q27. Molar conductance of a 1.5 M solution of an electrolyte is found to be 138.9 siemen cm^2. What would be the specific conductance of this solution?

Q28.Give molar conductivities at infinite dilution : Λ^0m for Ba $(OH)_2$= 457.6 Ω^{-1} cm^2 mol^{-1}
Λ^0m for $BaCl_2$ = 240.6Ω^{-1} cm^2 mol^{-1},, Λ^0m for NH_4Cl = 129.8Ω^{-1} cm^2 mol^{-1}. Calculate Λ^0m for NH_4OH.

Q29. $Cu^{2+} + 2e^- \longrightarrow Cu$, $E^0 = +0.34$ V : $Ag^+ + 1e^- \longrightarrow Ag$, $E^0 = +0.80$V.

i) construct a galvanic cell using the above data.

ii) for what concentration of Ag^+ ions will the emf of the cell be zero at 25^0C , if the concentration of Cu^{2+} is 0.01M? (log 3.919 = 0.593)

Q30. What type of battery is lead storage battery? Write the anode and the cathode reactions and the overall reactions occurring in a lead storage battery.

Q31. What is a fuel cell? Give the construction and working of a fuel cell.

Biology: Prepare an investigatory project report on any one topic out of the following – Infertility in human/ IVF Technology/ Assisted Reproductive Technologies/ Tissue Culture/ Apiculture/ Amniocentesis/ Female Foeticide/ Conservation of Biodiversity/ Study of Hematology of man/ Bacillus thuringiensis/ Sexually transmitted Diseases/ Study of Ascariasis in children/ GM plants and animals/ Vermicompositing/ Organic Farming/Study of Air Pollution and its control in Doon Valley/ Plastic waste and its remedy.

Instructions :

i) The project report should be handwritten in A-4 size pages.

ii) The project report should be presented in the following order-

a) Cover Page showing title of the project, student information name of school and academic session.

b) Acknowledgement

c) Chapters with relevant headings

d) Summary and Conclusion based on findings

e) Bibliography

iii) Credit will be awarded to the original drawings, illustrations and creative use of materials.

iv) All photographs and sketches should be labelled and acknowledged.

History : The students should make a project file on 'THROUGH THE EYES OF TEAVELLORS'. The project should consist of the following :

a) Title Page b) Acknowledgment c) Table of Contents d) Introduction e) The body of the project should have description of the Traveller's Accounts on India, Pictures, Data and other relevant information.

f) Conclusion should have students' observations on the topic. g) Bibliography and References

---

Geography : Prepare maps in accordance to the list provided by the subject teacher and also prepare the introduction of field survey.

Economics : Students to pick ANY ONE of the two suggested projects :

a) **Project (OPTION) ONE :** What is going around us. (eg. Demonetization, Goods and Services Tax)
Scope of the Project : a) Introduction b) Details of the topic c) Pros and Cons of the Economic event d) Major Criticism related to the topic e) Students views and perceptions

b) **Project (OPTION TWO) :** Analyse any concept from the syllabus.
Scope of the Project: a) Explanation of the Concept b) Application of the Concept c) Diagrammatic Explanation d) Numerical Explanation related to the concept if any e) Students own views and perception.

Account:

Q1. A limited was registered with an authorized capital of Rs 2,00,000 divided in Rs 10 shares. During the first year 6,000 shares out of the above, were issued to the vendors of building, 8,000 shares were offered to the public and Rs 5 per share were called up. On application Rs 2, Rs 1 on allotment, Rs 1 on first call and Rs 1 on second call. the amounts received on these shares were as follows :

On 6,000 shares the full amount called.
On 1,250 shares Rs 4 per share.
On 500 shares Rs 3 per share.
On 250 shares Rs 2 per hare.
The directors forfeited 750 shares on which less than Rs 4 per share were paid.
show Journal Entries to record the above transactions and show the above transactions in companies balance sheet.

Q2. Sita Ltd. invited applications for 50,000 equity shares of Rs 10 each, payable as under :

Rs 3	On application
Rs 3	On allotment
Rs 2	On first call
Rs 2	On final call

Applications were received for 85,000 shares, Pro-rata allotment was made to the applicants for 70,000 shares, remaining being refused. Over payments on application were to be applied towards sum due on allotment.
Mr. A, a holder of 200 shares failed to pay allotment money and on his subsequent failure to pay first call, his shares were forfeited.
Mr. S a holder of 750 shares failed to pay two calls. These shares were forfeited after the final call was made.
Out of these, 500 shares were re-issued to Mr. G @ Rs 8 per share fully paid up (whole of Mr. A's shares being included) Pass journal entries.

Q3. 'Sugandha Exports' Ltd. invited applications for 10,000 Equity shares of Rs 10 each for public subscription. The amount payable on shares is payable as under :

On Application	Rs 1 per share
On Allotment	Rs 2 per share
On First call	Rs 3 per share
On Second Call	Rs 4 per share '

All monies payable on application, allotment and calls have been duly received with the following exceptions :
'A' who hold 100 shares failed to pay the money on allotment and call.
'B' to whom 50 shares have been allotted failed to pay the money on first and final call.
'C' who holds 30 shares, have not paid the amount due on final call .
The share of 'A', 'B' and 'C' were forfeited.
Pass journal entries in the books of Sugandha Exports Ltd, including bank transactions and show the above transactions in companies balance sheet.

Q4. 'A' Ltd. invited applications for 15,000 equity shares of Rs 10 each payable as follows :

On Application	Rs 2 per share
On Allotment	Rs 3 per share
On First Call	Rs 4 per share
On Second Call	Rs 1 per share

All the shares have been subscribed and paid for except the following :

a) X, who held 300 shares, failed to pay the money on allotment and calls.
b) Y, to whom 200 shares have been allotted, failed to pay the money due on first call and final call.
c) Z, to whom 500 shares were allotted, has not paid the amount due on final call.

The shares of X, Y and Z are forfeited and are subsequently re-issued for cash as fully paid at a discount of 10%.
Give necessary journal entries to record these transactions in the books of A. Ltd.

Q5. 'A' Limited Company invites applications for 50,000 equity shares of Rs 10 each payable as follows :

On Application	Rs 3
On Allotment	Rs 4
On First Call	Rs 2

On Final call the balance
Applications were received for 55,000 shares. Allotments were made to the following basis:

a) To applicants for 35,000 shares – in full.
b) To applicants for 20,000 shares- 15,000 shares.

Excess money paid on application was utilized towards allotment money.
A share holder who was allotted 1,500 shares out of the group applying for 20,000 shares failed to pay allotment money and money due on calls. These shares were forfeited. 1,000 forfeited shares were re-issued @ Rs 8 per share fully paid up.
Show the Journal entries in the book of company.

Q6. A company offered 10,000 shares of Rs 10/- each payable as Rs 2/- on application, Rs 3/- on allotment Rs 3/- on 1st call and Rs 2/- on the final call.
The public applied for 15,000 shares, the shares were allotted on a pro-rata basis to the applicants of 12,000 shares. All shareholders paid the allotment money excepting one shareholder who was allotted 200 shares. These shares were forfeited. The first call was made thereafter. The forfeited shares were re-issued @ Rs 8/- per share Rs 8/- paid up. The final call was not yet made.
You are required to prepare the Cash Book and Pass journal entries.

Q7. 'Bharat' Ltd. invited applications for issuing 2,00,000 equity shares of Rs 10 each. The amount was payable as follows :
On Application Rs 3 per share; On Allotment Rs 5 per share, and on First and Final call Rs 2 per share.
Applications for 3,00,000 shares were received and prorata allotment was made to all the applications.
"Bajaj", who was allotted 3,000 shares failed to pay the allotment and call money. His shares were forfeited. Out of the forfeited shares 2,500 shares were reissued as fully paid up @ Rs 8 per share.
Pass the necessary journal entries to record the above transactions.

Q8. P & J Ltd. Company was established with an authorized capital divided into 4000 shares of Rs 10 each. 32,000 shares were issued and subscribed for by the public payable as the amount received in respect of these shares were as follows :
on 24,000 shares full amount called
on 5,000 shares Rs 8 per share

on 2,000 shares Rs 6 per share
on 1,000 shares Rs 4 per share

The Directors forfeited 3,000 shares on which less than Rs 8 per share has been paid and pass journal entries in the books of the company for the record of above transactions in companies balance sheet.

Q9. AB Ltd. invited applications for 1,00,000 Equity shares of Rs 10 each, payable as Rs 2 on application, Rs 3 on allotment and the balance on first and final call. Applications were received for 3,00,000 shares and the shares were allotted on a pro rata basis. The excess application money was to be adjusted against allotment only. M, a shareholder, who has applied for 3,000 shares, failed to pay the call money and his shares were accordingly forfeited and reissued at Rs 8 per share as fully paid. Pass necessary journal entries.

Q10. Sangita Limited invited application for issuing 60,000 shares of Rs 10 each at par. The amount was payable as follows :

On Application	Rs 2 per share
On Allotment	Rs 3 per share
On First and Final Call	Rs 5 per share

Applications were received for 92,000 shares. Allotment was made on the following basis :

a) To applicants for 40,000 shares- Full
b) To applicants for 50,000 shares – 40%
c) To applicants for 2,000 shares- Nil

Rs 1,08,000 was realized on account of allotment (excluding the amount carried from application money) and Rs 2,50,000 on account of call.

The directors decided to forfeit shares of those applicants to whom full allotment was made and on which allotment money was overdue. Pass Journal entries in the books of Sangita Limited to record the above transactions.

Q11. A company forfeited 100 equity shares of Rs 100 each issued at a premium of 50% (to be paid at the time of allotment) on which first call money of Rs 30 per share was not received; final call of Rs 20 is yet to be made. These shares were subsequently reissued at Rs 70 per share as Rs 80 paid up.

Give necessary Journal Entries regarding forfeiture and reissue of shares.

Q12. 'Hindustan Steel' Ltd invited applications for 50,000 equity shares of Rs 10 each at a premium of Rs 4 per share. The amount was payable as follows :

On Application	Rs 4 (including premium Rs 2)
On Allotment	Rs 6 (including premium Rs 2)
On first and final call – Balance	

Applications for 60,000 shares were received. Allotment was made to all the applicants on pro-data basis. Excess application money was adjusted towards sums due on allotment. Ram to whom 400 shares were allotted, failed to pay allotment and call money. Shyam, to whom 200 shares were allotted, failed to pay the call money. These shares were forfeited. The forfeited sharers were re-issued @ Rs 8 per share fully paid up.

Pass the necessary journal entries in the books of the company.

Q13. 'K' Limited has been registered with an authorized capital of Rs 2,00,000 divided into 2,000 shares of Rs 100 each of which, 1000 shares were offered for public subscription at a premium of Rs 5 per share, payable as under :

	Rs
On Application	10
On Allotment	25 (including premium)
On First Call	40
On Final Call	30

Applications were received for 1,800 shares, of which applications for 300 shares were rejected outright; the rest of the applications were allotted 1,000 shares on pro-rata basis. Express application money was transferred to allotment.

All the monies were duly received except from Sundar, holder of 100 shares, who failed to pay allotment and first call money. His shares were later forfeited, and reissued to Shyam at Rs 60 per share Rs 70 paid up. Final call has not been made.

Prepare Cash Book and Pass Journal Entries in the books of K Limited.

Q14. 'S. India' Ltd. issued for public subscription 40,000 equity shares of Rs 10 each at a premium of Rs 2 per share payable as under :

On Application	Rs 2 per share
On Allotment	Rs 5 per share (including premium)
On First Call	Rs 2 per share
On Second Call	Rs 3 per share

Applications were received for 60,000 shares. Allotment was made pro-data to the applications for 48,000 shares, the remaining applications being refused. Money overpaid on application was applied towards sum due on allotment. A to whom 1,600 shares were allotted failed to pay the two calls. The shares of A and B were subsequently forfeited after the second call was made. 3,000 of the forfeited shares were reissued at Rs 7/- per share fully paid. The reissued shares including all shares of B. Pass journal entries in the books of S. India Ltd. to record the above transactions.

Q15. A company issued for public subscription 50,000 equity shares of Rs 10 each at a premium of Rs 2 per share, payable as under :

On Application	Rs 2 per share
On Allotment	Rs 5 per share (including premium)
On First and Final Call	Rs 5 per share

Applications were received for 75,000 equity shares. The shares were allotted pro-rata to applicants of 60,000 shares, the remaining applications being rejected. Money overpaid on application were utilized towards the sum due on allotment.

'A' to whom 2,000 shares were allotted failed to pay the allotment money and the call money.

'B' who was allotted 2,500 shares failed to pay the call money. These shares were subsequently forfeited after the first and final call was made. The shares forfeited from 'B' were allotted to 'X' at Rs 9 per share fully paid. Of the shares forfeited from 'A' 1,500 shares were reissued to 'Y' at Rs 11 per share.

Pass necessary journal entries to record the above transactions in the books of the company and show working notes clearly.

Q16. 'National Heavy Chemicals' Ltd. issued 5,000 SHARES of Rs 10 each at a premium of Rs 2 per share for public subscription, payable as Rs 5 on Application, and Rs 7 on allotment (including premium). 'Rajesh' who was allotted 200 shares by the company failed to pay the allotment amount and his shares were forfeited by the company. 100 out of these forfeited shares were allotted to Brijesh as fully paid up for Rs 8 per share. Record the transactions relating to forfeiture and reissue of shares.

Q17. Bharat Tyres Ltd issued applications for 1,00,000 equity shares of Rs 10 each, at a premium of Rs 4 per share. The amount was payable as follows :

On applications Rs 6 (including Rs 2 premium), on allotment Rs 6 (including Rs 2 premium), Balance on first and final call.

Application for 1,50,000 shares were received. Allotment was made to all applicants on pro-rata basis. Subodh to whom 100 shares were allotted, failed to pay the call money. These shares were forfeited and afterwards re-issued @ Rs 8 per share fully paid up.
Pass the necessary journal entries.

Q18. Z Ltd invited applications for issuing 40,000 equity shares of Rs 10 each at a premium of Rs 2 per share. The amount was payable as follows :
On Application Rs 6 (including premium) and balance on Allotment.
Applications for 50,000 shares were received. Pro-rata allotment was made to all applicants. Excess money received on application was adjusted towards sums due to allotment.
A shareholder to whom 8,000 shares were allotted failed to pay the allotment money and therefore, his shares were forfeited. Later on the forfeited shares were re-issued for Rs 70,000 as fully paid up.
Pass necessary journal entries in the books of Z Ltd.

Q19. Shakti Ltd. invited applications for issuing 2,00,000 equity shares of Rs 100 each at a premium of Rs 10 per share. The amount was payable as follows :
On application Rs 40 per share (including premium) on allotment Rs 30 per share and the balance on first and final call. Applications for 3,00,000 shares were received. Applications for 40,000 shares were rejected and pro-rata allotment was made to the remaining applicants. Over payments on applications were adjusted towards sums due on allotment. Manoj who was allotted 12,000 shares failed to pay the allotment and first and final call money. His shares were forfeited. the forfeited shares were re-issued at Rs 90 per share fully paid up.
Pass necessary journal entries in the books of Shakti Ltd. showing the working clearly.

Q20. Arti Limited invited applications for issuing 80,000 shares of Rs 10 each at a remium of Rs 4 per share. The amount was payable as follows :

On Application	-	Rs 5 per share
On Allotment	-	Rs 9 per share (including premium)

Applications were received for 1,40,000 shares.
Allotment was made on the following basis :
i) To applicants for 80,000 shares – 60,000 shares
ii) To applicants for 60,000 shares – 20,000 shares
Money overpaid on applications was utilized towards sum due on allotment.
Rajiv, who had applied for 1,200 shares failed to pay his dues and his shares were forfeited. Pass journal entries in the books of Arti Limited to record the above transactions.

Q21. X Ltd. invited applications for issuing 80,000 equity shares of Rs 10 each at a premium of Rs 2 per share. The amount was payable as follows :
On application Rs 6 (including premium) per share
On allotment Rs 3 per share and the balance on first and final call. Applications for 90,000 shares were received. Applications for 5,000 shares were rejected and pro-rata allotment was made to the remaining applicants. Over payments received on application was adjusted towards sums due on allotment. All calls were made and were duly received except the allotment and final call on 1600 shares allotted to Vijay. These shares were forfeited and the forfeited shares were re-issued for Rs 18,4000 fully paid up.
Pass necessary journal entries in the books of the company.

Q22. Janta Ltd. invited application for issuing 70,000 equity shares of Rs 10 each at a premium of Rs 2 per share. The amount was payable as follows :

On application	Rs 4 per share (including premium)
On allotment	RS 3 per share
On first and final	Balance

Applications for 1,00,000 shares were received. Applications for 10,000 shares were rejected. Shares were allotted to the remaining applicants on pro-rata basis. Excess money received with applications were adjusted towards sums due on allotment. All calls were made and were duly received except first and final call on 700 shares allotted to Kanwar. His shares were forfeited. The forfeited shares were re-issued for Rs 77,00 fully paid up.
Pass necessary journal entries for the books of the company for the above transactions.

Q23. Seema Ltd. invited applications for issuing 2,00,000 equity shares of Rs 10 cash at a premium of Rs 3 per share. The amount was payable as follows :
On Application Rs 5 per share (including premium)
On Allotment Rs 4 per share
On First and Final Call – the balance
Application for 2,60,000 shares were received. Applications for 20,000 shares were rejected. To the remaining applicants, shares were allotted on pro-rata basis. Excess received on application was adjusted with sums due on allotment. All calls were made and were duly received except the first and final call of Mr. Sudhir who applied for 2,400 shares. His shares were forfeited. the forfeited shares were re-issued for Rs 28,800 fully paid- up.
Pass necessary journal entries for the above transactions in the books of the company.

Q24. X Limited invited 50,000 shares of Rs 10 each at a premium of Rs 2 per share payable as follows :
Rs 3 on application
Rs 6 on allotment (including premium)
and Rs 3 on call.
Applications were received for 75,000 shares and pro-rata allotment was made as follows :
To the applicants of 40,000 shares, 30,000 shares were issued and for the rest 20,000 shares were issued. All moneys due were received except the allotment and call money from Ram who had applied for 1,200 shares (out of the group of 40,000 shares). All his shares were forfeited. The forfeited shares where re-issued for Rs 7 per share fully paid up. Pass necessary Journal Entries for the above transactions.

Q25. X Ltd. issued 40,000 Equity Shares of Rs 10 each at a premium of Rs 2.50 per share. The amount was payable as follows :

On application	Rs 2 per share
On allotment	Rs 4.50 per share (including premium)
and on call	Rs 6 per share

Owning to heavy subscription the allotment was made on pro-rata basis as follows :
a) Applicants for 20,000 shares allotted 14,000 shares.
b) Applicants for 56,000 shares allotted 16,000 shares.
c) Applicants for 48,000 shares allotted 16,000 shares.
It was decided that excess amount received on applications would be utilized on allotment and the surplus would be refunded.
Ram, to whom 1,000 shares were allotted, who belong to category (a), failed to pay allotment money. His shares were forfeited after the call.

BST :

Project 1 : Prepare a detailed project on application of Principles of Management stating its validity and importance. Also state how effectiveness and efficiency is affected due to the applicability of these principles in the organization.

Project 2: Prepare a detailed project on marketing. The project should cover the following parameters choosing of product, ingredients, production process, market research, questionnaire, competing brand, branding, labeling, packaging, pricing, channels of distribution, transportation and warehousing, promotion, firms USP and conclusion.

Note : A child can make a project on any of the topics mentioned in the list of projects provided by CBSE.

Physical Education:

1. Prepare a detailed study on Yoga and Life style – following points to be included :
   a) Asanas as Preventive Measures (Cover following Asanas) : i) Vajrasana/ Hastasana/ Trikonasana/ Ardhmatsyendrasana/ Bhujangasana/ Paschimottanasana/ Pavanmuktasana/ Sukhasana/ Gomukhasana/ Chakrasana/ Parvatasana/ Matsyasana/ Tadasana/ Vakrasana/ Shalbhasana/ Surya Namaskar.
2. Prepare a detailed study on Sports and Nutrition's – Following points to be included :
   a) Macro Nutrients/ Micro Nutrients/ Nutritive Components/ Non-Nutritive Components/Sources of various Nutrients .
   b) Deficiency Diseases : Protein/ Minerals and Vitamins

Note : Use of Photograph and Pictures is must.

Computer :

Q1. Define a class candidate in C++ with following Description: Private Members

- A data member RNo (Registration Number) of type long
- A data member Name of type string
- A data member Score of type float
- A data member Remark of type string
- A member function AssignRem( ) to assign Remarks as per the Score

obtained by a candidate. Score range and the respective Remarks are shown as follows:

Score Remarks

>=50 Selected

less than 50 Not selected

Public members

- A function ENTER( ) to allow user to enter values for RNo, Name, Score

& call function AssignRem() to assign the remarks.

- A function DISPLAY( ) to allow user to view the content of all the data

members.

Q2.Define a class ITEM in C++ with the following description :

Private Members

- Code of type integer (Item Code)
- Iname of type string (Item Name)
- Price of type float (Price of each item)
- Qty of type integer (Quantity of item in stock)
- Offer of type float (Offer percentage on the item)
- A member function GetOffer( ) to calculate Offer percentage as per the

following rule :

If Qty<= 50 Offer is 0

If 50 <Qty<= 100 Offer is 5

If Qty>100 Offer is 10

Public Members

- A function GetStock( ) to allow user to enter values for Code, Iname,

Price, Qty and call function GetOffer( ) to calculate the offer.

- A function ShowItem( ) to allow user to view the content of all the data

members.

Q3.Write a function in C++ to count the no. of "Me" or "My" words present in a text file "DIARY.TXT".

If the file "DIARY.TXT" content is as follows :

My first book was Me and My

family. It gave me chance to be known to the world.

The output of the function should be

Count of Me/ My in file : 4

Q4. Write a function in C++ to search for a laptop from a binary file "LAPTOP.DAT" containing the objects of class LAPTOP (as defined below). The user should enter the Model No and the function should search and display the details of the laptop.

```
class LAPTOP
{
long ModelNo;
float RAM, HDD;
char Details[120];
public:
void StockEnter( ) {cin>>Model No>>RAM>>HDD; gets(Details);}
void StockDisplay( ){cout<<ModelNo<<RAM<<HDD<<Details<<endl;}
long ReturnModelNo( ) { return ModelNo ;}
};
```

Q5.Find the output of the following program ;

```
#include<iostream.h>
#include <ctype.h>
void ChangeIt (char Text[ ], char C)
{
for (int K=0;Text [K]!='\0' ;K++)
{
if (Text[K] >='F' && Text[K] <='L')
Text[K]=tolower(Text[K]);
else if (Text[K]=='E' || Text[K]=='e')
Text[K]=C;
else if (K%2==0)
Text[K]=toupper(Text[K]);
else Text[K]=Text[K-1];
}
}
void main( )
{
char oldText[ ]= "pOwERALone" ;
ChangeIt (oldText,'%');
cout<<"New TEXT:"<<oldText<<endl;
}
```

Q6. Answer (i) to (ii)

```
Class Car
{       Char Model [10];
        Char Date of Purchase [10];
        Char Company [20];
Public :
Car ( ) ;
        Void enterdetails( );
        Void show ( ) ;
Class accessories : public car
{       protected:
        Char stereo tape [30];
Public :
Float price ;
Accessories( ) ;
Void enter ( );
Void showcace( );
};
Class Dealer: Public car
{       intndeleass;
        Char dname [20];
        Intnproducts;
Public :
Dealer ( );
Void edetails( ) ;
Void eshow( );
```

i) How many bytes will be required by an object of class car and object of class dealer.
ii) What type of inheritance is illustrated.
iii) Write the members accessible from member functions of class accessories.
iv) Write the member functions which are accessible from the object of class dealer.

Q7What is function overriding ? How is it different from function overloading?
Q8 What are the different modes in which a file can be opened. Write all in a tabular form along with their explanation.
Q.9 What is visibility mode? Mention the differences between private, public and protected visibility mode?
Q10. Define the following :
(a) Data Encapsulation (b) Data Abstraction (c) Polymorphism and its types (d) Data Hiding .

Psychology: 1. Do the practical 1, 2 (Intelligence and Self)
2. Do you case study as per your convince on the subject chosen as discussed in the Class.
3. Do the questions and answer of chapter 1 to 3 and some important questions given below :

CHAPTER 1 (VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES)

1. Differentiate between psychometric and information processing approach to intelligence.
2. Explain Gardner's theory of multiple intelligences.
3. Describe structure-of-intellect model.
4. Describe Jensen's hierarchical model of intelligence.
   - Level I
   - Level II
5. Explain triarchic theory of intelligence.

- definition of intelligence by Sternberg
- Three types of intelligences: componential, contextual and experiential. Explanation of each of the three types of intelligences
- fig 1.1

6. What is cognitive assessment system? by Das and Naglieri

7. Explain the influence of nature and nurture on intelligence.
8. How can we classify intelligence tests?
- on the basis of administration: individual or group tests
- on the basis of the nature of items: verbal, non-verbal or performance
- on the basis of whether the test favors' one culture over other: culture-fair or culture-biased
9. The IQ of a 6 year old boy with MA 8 is..... IQ=MA/CA x 100
10. The MA of an 8 year old boy with IQ=80 is..... MA=IQ/CA x 100
11. Define emotional intelligence. Describe the characteristics of emotionally intelligent persons.
    - Definition: "the ability to monitor one's own and other's emotions, to .....
    - characteristics: Box 1.2
12. Describe PASS model of intelligence.
- By J.P. Das, Jack Naglieri, and Kirby (1994) Interdependent functioning of 3 neurological systems..... Arousal/attention, simultaneous and successive processing and planning(description of each)
13. Describe the theory of Primary Mental Abilities.
- by Thurstone 7 primary mental abilities.....
14. Explain Uni factor theory of intelligence. one factor theory By Alfred Binet intelligence consisting of one similar set of abilities
15. How are creativity and intelligence related?
- study of Terman in 1920s
- intelligence does not ensure creativity
- relationship between intelligence and creativity is positive
- a certain level; of intelligence is required for creativity but beyond that intelligence does not correlate well with creativity
16. Differentiate between integral and technological intelligence.
- Technological intelligence: foster skills of generalization, abstraction speed, minimal moves, and mental manipulation, attention, observation, analysis, performance.....
- integral intelligence: emphasis on connectivity with the social and world environment;
- Views intelligence from a holistic perspective
17. Explain concept of 'Buddhi' in the context of Indian tradition.
- skills included in Buddhi
- affective and motivational components
18. How are programmes aimed at improving emotional intelligence are beneficial for the students?
- characteristic of emotionally intelligent persons
- effects on academic achievement
- encourage cooperative behaviour and reduce their antisocial activities
- helpful in preparing students to face the challenges of life outside the classroom
19. How is interest different from aptitude? Which of the two is important in deciding about one's career?

CHAPTER 2 (SELF AND PERSONALITY)

20. Differentiate between Personal identity and Social identity.
- Personal identity: attributes of a person that make him/her different from others; e.g. -I am Sanjana.
- Social identity: those aspects of a person that link him or her to a social or cultural group or are derived from it; example -I am a Hindu.
21. Define: Self-esteem, Self-efficacy and Self-regulation. Self-esteem
22. Define Personality.
23. Describe any three techniques of self-control.
24. Differentiate between type, trait and interactional approaches to personality.
25. Describe the characteristics of Type-a, Type-B, Type-C and Type-D personalities.
26. Describe the trait theories of Allport and Cattell.
27. Describe Eysenck's theory of personality.

Note : Kindly do the question answers in home work note book.

Painting:

- Make 10 still life in water colour.
  Size – Half Imperial
  Colour – Artist Water Colour (Camelin)
  Brushes – Use Round Brushes

Music (Vocal) :

Q1. Life Sketch of Ustad Bade Gulam Ali Khan and Pt. Krishna Rao Shankar with view points :

a) Born on and Born in b) Early Life (Childhood) c) Musical Education d) Musical Contribution e) Death

Music (Instrumental Tabla) :

Q1. Brief description of Gharanas of Tabla like :

a) Delhi Gharana b) Ajrara Gharana c) Lucknow Gharana d) Banaras Gharana e) Farukhabad Gharana f) Punjab Gharna

Q2. History of Tabla.

Principal **Vice-Principal**