

**SRDAV PUBLIC SCHOOL, DAYANAND VIHAR
CLASS XII (2014 – 15)**

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ENGLISH HOLIDAYS HOMEWORK

1 Read the novel ‘Silas Marner’ and answer the following questions:

- What is the plot of the story? (100 words)
- Write the character sketch of Silas Marner. (100 words)

2 Write articles on the following topics in 150 words:

- Elections in India
- Women Empowerment
- Delhi – the most polluted city in the world

3 Collect samples of each type of classified advertisement and paste them in your register.

4 Collect information about educational qualifications required for the following professions:

- Chartered Accountant
- Sales Representative
- Teachers for various subjects
- Nursery teacher
- Receptionist
- Assistant administrative officer

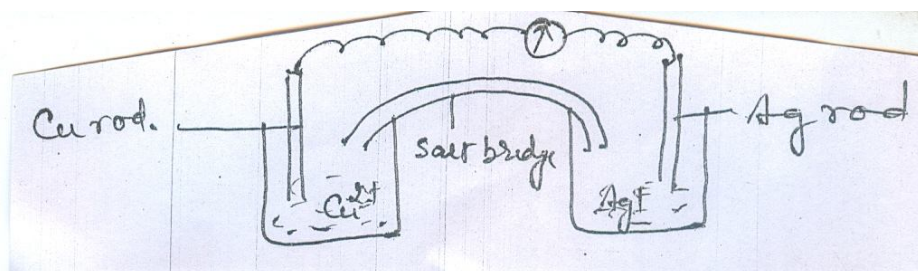
ENGG DRAWING

Prescribed Book : Modern Engg Graphics Pt II. Ch 17 Question Bank

Q.No. 6, 10,18,25,32,35,37,40,47,53,54,55,56,57,60,62,63,64,65 & 66

Class-XII Chemistry - Electrochemistry

- Q1. What is the use of platinum foil in SHE?
- Q2. Why does a cell stops working after some time?
- Q3. What is the effect of dilution on conductivity and molar conductivity?
- Q4. Why salt bridge is not required in lead storage cell?
- Q5. What are the reactions taking place at anode & cathode in $H_2 - O_2$ fuel cell?
- Q6. Why does a dry cell become dead after a long time even it has not been used?
- Q7. Can we use a copper vessel to store $MAgNO_3$ solution? Given $E^- Ag^+/Ag = 0.80V$.
- Q8. Unlike dry cell, the mercury cell has a constant cell potential throughout its useful life. Why?
- Q9. Derive the relationship between:
(a) Conductivity and molar conductivity
(b) Standard cell potential and equilibrium constant.
- Q10. Consider the electrochemical cell given in the diagram and answer the following questions:



- (a) What is the net cell reaction?
- (b) Mark the anode, cathode, positive and negative terminals.
- (c) Mark the direct flow of e^-
- (d) What is contained in salt bridge?
- (e) When will the cell stop working?
- (f) What happens when the concentration Cu^{2+} and Ag^+ ions are increased?
- Q11. Mobility of H^+ ions is high through the ice than the liquid water.
- Q12. Which of the following pairs will have higher conductance and why?

- (a) Copper wire and acetic acid solution at 25°C
 - (b) Copper wire at 25°C and copper wire at 50°C
 - (c) 0.1M acetic acid solution or 1M acetic acid solution
- Q13. What are the reactions taking place at anode and cathode in H₂ – O₂ fuel cell?
- Q14. What is the relationship between G & E_{cell}?
- Q15. What happens to the density of electrolyte when lead storage battery is discharged?
- Q16. Why is alternating current used for measuring resistances of an electrolytic solution?
- Q17. Do we get same products during electrolysis of (a) molten NaCl & (b) aqueous NaCl?
- Q18. If a current of 0.20 A is passed through 50 ml of M/10 NaCl solution for 10 minutes, calculate the concentration of OH⁻ ions in the solution after the electrolysis.
- Q19. The value of Λ_M^α of Al₂(SO₄) is 858 Scm² mol⁻¹ while $\Lambda_{SO_4}^0$ is 160Scm² mol⁻¹ calculate the limiting ionic conductivity of Al³⁺
- Q20. The electrical resistance of diameter 1cm and length 50cm is 5.55 X 10³Ω. Calculate its resistivity, conductivity and molar conductivity.

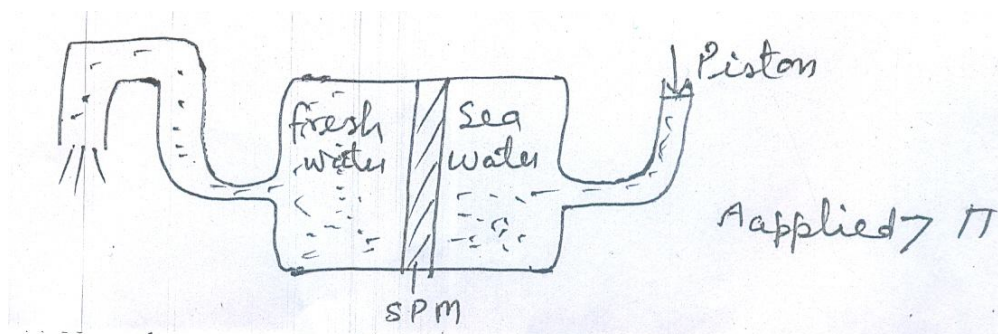
Solids

- Q1. Copper crystallizes in a f.c.c. structure. Atomic radius of an atom of copper is 128pm. Calculate the density of Cu. [At. mass of Cu = 635]
- Q2. The density of KBr is 2.75g/cc. The length of the edge of unit cell is 654pm. Predict the type of unit cell. [aT. mass of K = 39, Br = 80, N = t.023 A1023]
- Q3. CsCl has cubic structure. Its density is 3.99g/cc. What is the distance between Cs⁺ & Cl⁻? [At. mass of Cs = 133]
- Q4. Calculate the value of Avagadro's No. from the following data:
Density of NaCl = 2.165g/cc, distance between Na⁺ & Cl⁻ in NaCl = 281pm.
- Q5. Silver crystallizes with f.c.c. unit cells. Each side of the unit cell has a length of 409pm. What is the radius of an atom of silver?
- Q6. Xenon crystallizes in f.c.c. lattice and edge of the unit cell is 620 pm. What is the nearest neighbour distance ℓ . What is the radius of xenon atom? [438.5 pm ℓ 219.25 pm]
- Q7. The two ions A⁺ & B⁻ have radii 88 & 200 pm respectively. In the closed packed crystal of compound AB, predict the coordination no. of A⁺.
- Q8. In a crystalline solid, anions base arranged in ccp lattice. Cations A are equally distributed between octahedral and tetra hedral vois. If all the octa hedral voids are occupied what is formula of solid?

- Q9. A solid $A^+ B^-$ has NaCl type structure. If the anion has the radius of 241.5 pm, what should be radius of cation? Can a cation C^+ having radius of 50 pm be fitted into the tetrahedral hole of the crystal $A^+ B^-$?
- Q10. Give reason:
 (a) Why is Frenkel defect found in AgCl?
 (b) What is the difference between phosphorus doped and gallium doped semi conductors?
- Q11. $CaCl_2$ will introduce Schottky defect if added to AgCl crystal. Explain.
- Q12. Why does ZnO exhibit enhanced electrical conductivity upon heating?
- Q13. The electrical conductivity of metal decreases while that of semi conductor increases with increase in temperature. Explain

Solutions

- Q1. O_2 bubbled through water at 293K. Assuming that O_2 exists a partial presence of 0.98 bar, calculate the solubility of O_2 in g/l. The value of K_4 for O_2 is 34.84 R bar.
- Q2. An aq. Solution of glucose is made by dissolving 10g of glucose in 90g of water at 303K. If the V.P. of pure water at 303K is 32.8 Hg, what would be the V.P. of solution?
- Q3. Differentiate between diffusion & osmosis.
- Q4. Calculate the freezing point of aq. Solution containing 10.50g of $MgBr_2$ in 200g of water. K_f for H_2O is 186K kg mol⁻¹ & M.M. of $MgBr_2$ = 184
- Q5. 1.2% solution of NaCl is isotonic with 7.2% solution of glucose (MM = 180). Calculate the degree of dissociation and Van't Hoff factor for NaCl solution.
- Q6. State Henry's law for solubility of gases in liquid. At the same temperature, hydrogen is more soluble in water than helium. Which of them has higher value of K_H & why?
- Q7. 0.5M aqueous solution of sodium chloride show higher value of osmotic pressure than 0.5M glucose solution at the same temperature, why?
- Q8. Why do aquatic species remain more comfortable in lakes in winter than in summer?
- Q9. What happens when red blood corpuscles (R.B.C.) are placed in
 (a) 0.5% NaCl solution
 (b) 1% NaCl solution
- Q10. The figure gives a rough sketch of a plant for carrying out some process



- (a) Name the process occurring in the above plant and also the phenomenon.
 (b) To which container does the net flow of purified water occurs?
 (c) Name the SPM that can be used in this plant.
- Q11. How does sprinkling of salt of CaCl_2 help in clearing the snow-covered roads in hilly areas?
 Q12. Why do we have feeling of weakness of discomfort in breathing at high altitude?
 Q13. Cutting onion taken from refrigerator is relatively more comfortable than that lying at room temperature, why?
 Q14. Why soda water bottle kept of room temperature fizz out on opening?
 Q15. What re azeotropes? Give one example each of minimum boiling and maximum boiling azeotrope.
 Q16. What are antifreeze solution? Which substance is commonly used as antifreeze?
 Q17. Why are aquatic species more comfortable in cold water as compared to warm water?
 Q18. Why the use of pressure cooker reduces cooking time?
 Q19. What is the effect of temperature on the following:
 (a) Molarity (b) molality (c) mole fraction
 Q20. Why common salt is added to water used for boiling eggs to get hard boiled eggs?
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BIOLOGY -XII

1. Assignment consisting of 30 questions from lessons – Human Reproduction, Reproductive Health and Principles of Inheritance and Variation should be done in the class register.
 2. Make a project on any topic of biology. Evaluation will be done on the basis of the content & the presentation of the project. It should have lot of pictures from magazines, newspapers, internet etc.
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PHYSICS – XII

Q.1) Write five Natural Consequences involving Refraction or Dispersion or Total Internal Reflection of light

Q.2) Why do vehicles appear slower when look through from the rear view mirror. Obtain the expression to prove this.

Q.3) Draw ray diagram of the formation of Primary & Secondary rainbows considering spherical water droplets.

Q.4) Draw ray diagrams for the following cases involving Porro / totally reflecting Prism

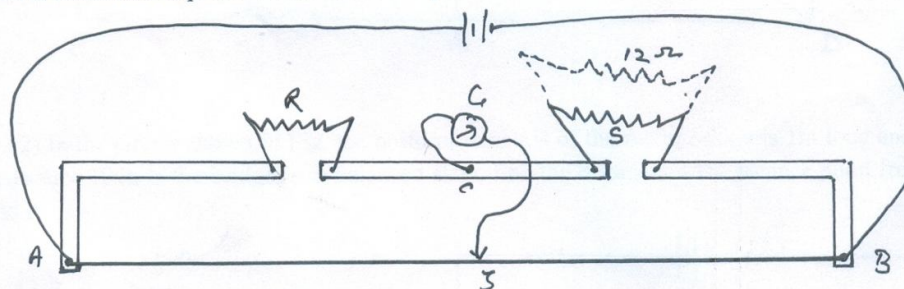
i) Deviation by 90° ii) Deviation by 180° with inversion iii) Inversion without deviation

Q.5) Draw the ray diagrams showing image formation in Compound Microscope & Telescope in normal setting & hence derive the expression for Magnifying Power in both cases.

Q.6) a) Draw a neat labeled diagram of human eye

b) Describe the possible major defects of eye and explain how they are rectified.

Q.7) In a meter bridge, the null point is found at a distance of 40cm from A. If a resistance of 12Ω is connected in parallel with S, the null point occurs at 50cm from A. Determine R and S.

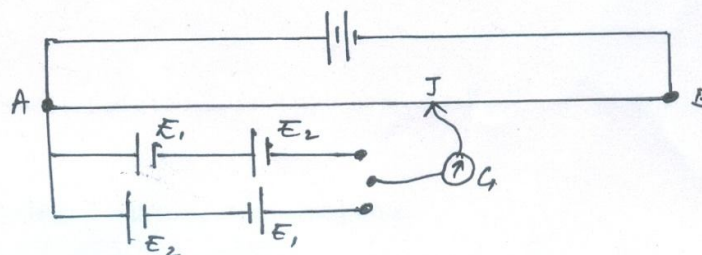


Q.8) In a meter bridge experiment, resistors of resistance 5Ω and 2Ω are connected in the left and right gap respectively. When the resistor of 5Ω is shunted by a wire, the balance point is found at 62.5cm mark. What is the resistance of the wire?

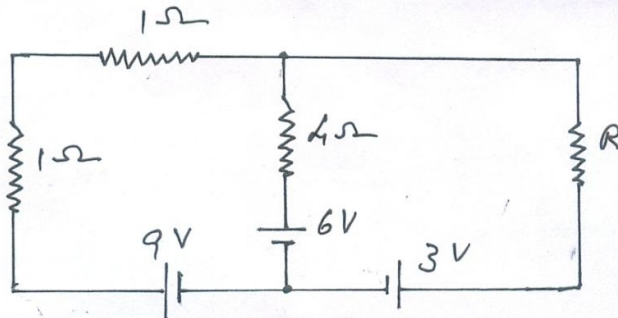
Q.9) A circuit using a potentiometer and a battery of negligible resistance is set up to develop a constant potential gradient along the wire AB. Two cells of e.m.f. E_1 and E_2 are connected in series in two different combinations as shown in Fig. The balance points are obtained respectively at 400cm and 240cm from point A.

a) Find E_1/E_2

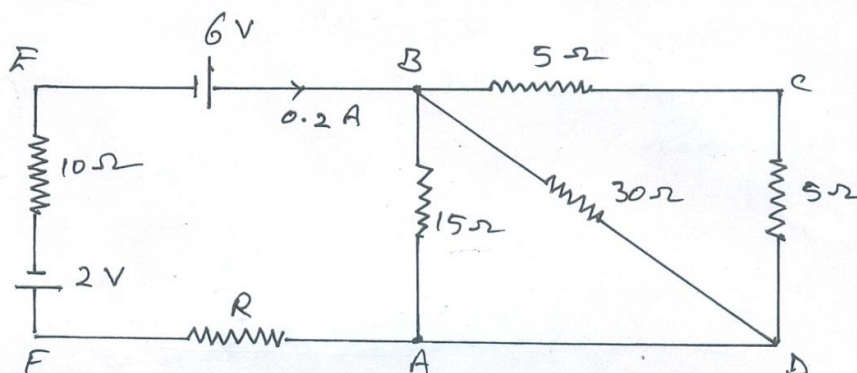
b) Find the balancing point for E_1



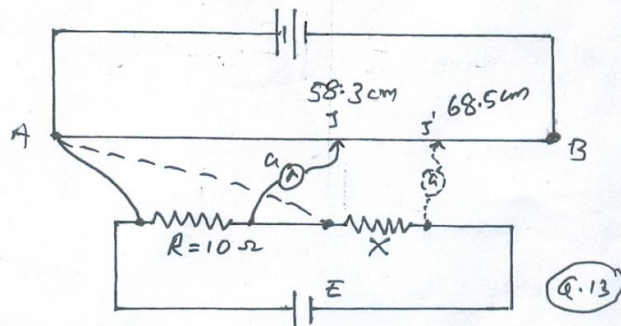
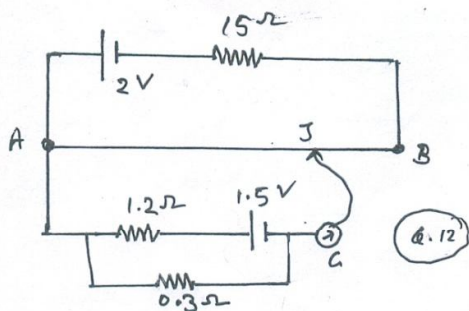
Q.10) Using Kirchhoff's rule; determine the value of unknown resistance R in the circuit shown in Fig, so that no current flows through 4Ω resistance. Also find the potential difference between A and D.



Q.11) Calculate the value of resistance R in the circuit shown in fig so that the current in the circuit is $0.2A$. What would be the potential difference between the points A and B.



Q.12) In the circuit shown in Fig, the uniform wire AB of the metre bridge is 1m long and is of resistance 10Ω . If the bridge is in balanced state, find the distance of the balance point from the end A



Q.13 Fig shows a potentiometer circuit for comparison of two resistances. The balance point with a standard resistor $R = 10\Omega$ is found to be 58.3 cm , while that with the unknown resistance X is 65.5 cm .

a) Determine the value of X

b) What would you do if you failed to find a balance point with the given cell E ?

Q.14) Prepare one investigatory Project with some experimental work.

Maths (Class XII)
Chpater-3,4 (Matrices & Determinants)

- Q1. Find the value of x, y, z if $\begin{bmatrix} x+y+z \\ x+z \\ y+z \end{bmatrix} = \begin{bmatrix} 9 \\ 5 \\ 7 \end{bmatrix}$
- Q2. A matrix has 3 rows and 4 columns. How many elements a matrix has?
- Q3. Given a matrix $A = [a_{ij}]$, $1 \leq i \leq 3$, $1 \leq j \leq 2$
 Where $a_{ij} = \frac{4i-j}{5}$ write the element a_{22} , a_{21} , a_{34} & a_{12}
- Q4. A matrix has 20 elements, what are the possible orders of a matrix?
- Q5. Find AB, if defined:
- (a) $A = \begin{bmatrix} 1 \\ 2 \end{bmatrix}$, $B = \begin{bmatrix} 3 \\ 4 \end{bmatrix}$
- (b) $A = \begin{bmatrix} 1 \\ 2 \end{bmatrix}$, $B = [3 \ 4]$
- Q6. Solve for x : $\begin{bmatrix} 2 & -1 \\ 1 & 2 \end{bmatrix} \begin{bmatrix} 1 \\ 3 \end{bmatrix} = 0$
- Q7. If points (a, b) , (a_1, b_1) and $(a-a_1, b-b_1)$ are collinear show that $ab_1 = a_1b$
- Q8. Find the value of x , if $\begin{vmatrix} 2 & 4 \\ 5 & 1 \end{vmatrix} = \begin{vmatrix} 2x & 4 \\ 6 & x \end{vmatrix}$
- Q9. How many values of k are possible, if area of a triangle with vertices $(2, 0)$, $(k, 5)$ $(-1, 3)$ is 7 sq. units? Give reason.
- Q10. For a given square matrix A , $|A| = -4$ and $A(\text{adj}A) = \lambda I$ Find the value of λ
- Q11. Find matrix X such that:

$$A - 2B + X = 0 \text{ where } A = \begin{bmatrix} 5 & 3 \\ -3 & 1 \end{bmatrix}; \quad B = \begin{bmatrix} 0 & -2 \\ 3 & 1 \end{bmatrix}$$

Q12. Find the inverse of the matrix $\begin{bmatrix} 1 & 3 \\ 2 & 7 \end{bmatrix}$ using E.R.T.

Q13. If $A = \begin{bmatrix} 2 & 3 \\ 1 & 2 \end{bmatrix}$, prove that $A^3 - 4A^2 + A = 0$

Q14. Express the following matrix as the sum of a symmetric and a skew symmetric matrix:

$$\begin{bmatrix} 1 & 3 & 5 \\ -6 & 8 & 3 \\ -4 & 3 & 5 \end{bmatrix}$$

Q15. Find A^{-1} of matrix $A = \begin{bmatrix} a & b \\ c & \frac{1+bc}{a} \end{bmatrix}$ and show that $aA^{-1} = (a^2 + bc + 1)I - A$

Q16. Without expanding prove that $\begin{vmatrix} 1 & a & a^2 - bc \\ 1 & b & b^2 - ac \\ 1 & c & c^2 - ab \end{vmatrix} = 0$

Q17. Using properties of determinants, solve for x : $\begin{vmatrix} a+x & a-x & a-x \\ a-x & a+x & a-x \\ a-x & a-x & a+x \end{vmatrix} = 0$

Q18. P.T. (using properties)

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

Q19. Solve (using properties)

$$\begin{vmatrix} x+4 & 2x & 2x \\ 2x & x+4 & 2x \\ 2x & 2x & x+4 \end{vmatrix} = 0$$

Q20. P.T.(using properties)

$$\begin{vmatrix} a & b & c \\ a-b & b-c & c-a \\ b+c & c+a & a+b \end{vmatrix} = a^3 + b^3 + c^3 - 3abc$$

Q21. Using matrix method, solve the following example:

$$2x + 6y = 2$$

$$3x - z = -8$$

$$2x - y + z = -3$$

Q22. If $A = \begin{bmatrix} 2 & -3 & 5 \\ 3 & 2 & -4 \\ 1 & 1 & -2 \end{bmatrix}$ Find A^{-1} , using A^{-1} solve,

$$2x - 3y + 5z = 11$$

$$3x + 2y - 4z = -5$$

$$x + y - 2z = -3$$

Q23. If $A = \begin{bmatrix} 2 & 3 & 1 \\ 3 & -2 & 1 \\ 7 & -1 & 2 \end{bmatrix}$ Find A^{-1} , using A^{-1} solve,

$$2x + 3y + 7z = 12$$

$$3x - 2y - z = 0$$

$$x + y + 2z = 4$$

Q24. Determine the product: $\begin{bmatrix} -4 & 4 & 4 \\ -7 & 1 & 3 \\ 5 & -3 & -1 \end{bmatrix} \begin{bmatrix} 1 & -1 & 1 \\ 1 & -2 & -2 \\ 2 & 1 & 3 \end{bmatrix}$ and use it to solve the system

of eqs:

$$x - y + z = 4$$

$$z - 2y - 2z = 9$$

$$2x + y + 3z = 5$$

Q25. Solve:

$$5x + 3y + 7z = 4$$

$$3x + 26y + 2z = 9$$

$$2x + 2y + 10z = 5$$

Q26. Find inverse (using E.R.T.):

$$\begin{bmatrix} 2 & -1 & 3 \\ 3 & 2 & -1 \\ 4 & 5 & -5 \end{bmatrix}$$

Q27. For the matrix $A = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 2 & -3 \\ 2 & -1 & 3 \end{bmatrix}$

Show that $A^3 - 6A^2 + 5A + 11I = 0$, hence find A^{-1}

Q28. Find the matrix A satisfying the matrix equation:

$$\begin{bmatrix} 2 & 1 \\ 3 & 2 \end{bmatrix} A \begin{bmatrix} -3 & 2 \\ 5 & -3 \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

Q29. Solve:

$$\frac{2}{x} - \frac{3}{y} + \frac{3}{z} = 10$$

$$\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = 10$$

$$\frac{3}{x} - \frac{1}{y} + \frac{2}{z} = 13$$

Q30. Find inverse (using E.C.T.):

$$\begin{bmatrix} 2 & 1 & 1 \\ 1 & 3 & -1 \\ 3 & 1 & -2 \end{bmatrix}$$

Chapter-1 (Relation & Functions)

Q1. Let $A = [1, 2]$, $B = [1, 3]$ and R is a relation from set A to set B defined as:

$R = [(1, 1), (1, 3), (2, 1), (2, 3)]$. Is 'R' a universal relation? Give reason.

Q2. Let Z be the set of all integers and the relation R in Z, defined by:

$R = [(a, b) : a - b \text{ is divisible by } 3]$ is an equivalence relation. Write the equivalence class related to [1].

Q3. The function is defined as "To each person on earth is assigned the number which corresponds to his age." Is the function one-one?

Q4. Let $f(x) = |x|$ and $g(x) = [x]$

Evaluate: $f \circ g\left(\frac{-7}{3}\right) - g \circ f\left(\frac{-7}{3}\right)$

Q5. Consider the binary operation $*$ on Q defined as $a * b = a + 5b + ab$ for $a, b \in Q$, find $6 * \frac{1}{5}$

Q6. Show that the function $f: R - [-1] \rightarrow R - [1]$, given by $f(x) = \frac{x-3}{x+1}$ is bijective function.

Q7. Let $*$ be a binary operation on the set Q of rational numbers, defined as $a * b = a + ab$. Is $*$ commutative, associative?

Q8. Give an example of a relation which is reflexive and symmetric but not transitive.

Q9. Let $A = N \times N$ and $*$ be a binary operation on A , defined by $(a, b) * (c, d) = (a + c, b + d)$. Show that $*$ is commutative and associative. Find the identity element of A .

Q10. If $f(x) = \frac{5x+3}{4x-5}$, $x \neq \frac{5}{4}$, show that $f \circ f$ is an identity function.

Q11. Consider $f: R^+ \rightarrow [-5, \infty)$ given by $f(x) = 9x^2 + 6x - 5$. Show that f is invertible and also find f^{-1} .

Q12. Determine whether the relation $R = \{(x, y) : y \text{ is divisible by } x\}$ defined on set $A = \{1, 2, 3, 4, 5, 6\}$ is reflexive, symmetric and transitive.

Q13. Show that the relation R on the set

$A = \{x \in Z : 0 \leq x \leq 15\}$, given by

$R = \{(a, b) : |a - b| \text{ is a multiple of } 5\}$ is an equivalence relation.

Q14. Show that the function $f: R \rightarrow (-1, 1)$ defined by $f(x) = \frac{x}{1+|x|}$, $x \in R$ is one-one onto function.

Q15. Let $*$ be a binary operation on $Q - [-1]$ defined by $a * b = a + b + ab \forall a, b \in Q - [-1]$. Then:

- Show that $*$ is both commutative and associative.
- Find the identity element in $Q - [-1]$.
- Show that every element of $Q - [-1]$ is invertible. Also find the inverse of an arbitrary element.

ECONOMICS -XII
UNIT- 1

Unit 1: Introduction

- Q1** Why the problem of choice arises in an economy?
- Q2** What are the two factors which define scarcity?
- Q3** Why there is a need for economising of resources?
- Q4** What do you mean by a production possibility curve?
- Q5** What role PPC has in solving central problems of an economy?
- Q6** Give a table showing the production of two commodities with the help of given resources?
- Q7** Draw a production possibility curve.
- Q8** What does a PPC show?
- Q9** If we move from one point to another on PPC, what does it mean?
- Q10** Why the production at a point towards left hand side from PPC is not desirable?
- Q11** What do you mean by a point below PPC?
- Q12** How is it possible to increase the production of one commodity without sacrificing the production of other commodity when all the resources are utilised fully?
- Q13** Why do growth of resources and technological advances shift PPC to the right?
- Q14** PPC shows the fuller utilisation of resources, then how is it possible to produce more with the help of same resources?
- Q15** What is the meaning of growth of resources?
- Q16** What is the role of improved technology on a production possibility curve?
- Q17** What do you mean by under utilisation of resources?
- Q18** If all the resources are not used fully to produce commodities , what is it called?
- Q19** Explain the meaning of shift of PPC towards right hand side.
- Q20** On which side PPC will shift due to growth of resources?
- Q21** How an economy decides that what all should be produced with the help of given resources?
- Q22** In which direction PPC will shift due to a massive unemployment in the country ?
- Q23** If some producing units are destroyed because of earthquake in the country, how will it affect the PPC ?
- Q24** If number of skilled labour increases in the country, how will it affect PPC ?

UNIT II

CONSUMER'S EQUILIBRIUM WITH UTILITY APPROACH

1. Differentiate between “desire” and “demand” for a commodity.
 2. Why does an individual demand?
 3. Define utility
 4. What is meant by total utility?
 5. What is meant by marginal utility?
 6. State the law of Diminishing marginal utility?
 7. a) How is total utility derived from marginal utilities?
b) Who has introduced the concept of “utility”?
 8. What does the word equilibrium mean?
 9. What is consumer's equilibrium?
 10. State the condition of consumer's equilibrium?
 11. What do you understand by “rational consumer”?
 12. When does consumer buy more of commodity?
 13. State the relationship between demand for a commodity and its price?
 14. Why “other things being same” phrase is associated to law of demand.
 15. How does individual demand related to market demand.
 16. What are the factors that affect only market demand for the goods?
 17. What is meant by one good being substitute of another?
 18. What is meant by one good being complement of another?
 19. If the demand for good Y increases as the price of another good X rises, how are the two goods related?
 20. How will an increase in the price of coffee affect the demand for the tea?
 21. How will an increase in the price of petrol affect the demand for the car?
 22. Give two examples of normal goods
 23. What are inferior goods?
 24. How does an increase in income affect the demand curve for a normal good?
 25. State the factors that can cause a rightward shift of demand curve of a commodity?
 26. State the difference between changes in quality demanded and change in demand.
 27. What is the basic difference between shift of demand curve and movement along the curve?
 28. State the difference between decrease in demand and contraction of demand?
 29. What does “Elasticity of Demand” show?
 30. What will be the value of elasticity of demand If the demand is a horizontal line, parallel to x-axis?
 31. The price elasticity is 0.5, the percentage change in quality is 4. What is percentage change in price?
 32. What is price elasticity of demand for life saving drugs?
 33. What is the relationship between slope and elasticity of a demand?
 34. As the price of petrol increased by 5% the number of cars demanded falls by 8%. State the elasticity of demand.
 35. Which of the following commodities have inelastic demand?
Salt, medicine, mobile phone, School uniform, cold drink.
 36. The Demand curve has the slope of rectangular hyperbola. What is the elasticity of demand of that commodity?
 37. How will you measure price elasticity of demand at a point on the demand curve? Give formula.
 38. State the relationship between price of its substitute and demand for a commodity?
 39. Explain the total expenditure method of finding the elasticity of demand.
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BUSINESS STUDIES - XII

1. Management is an exact science like physics or chemistry. Do you agree?
2. Give any one point which justifies management as an art?
3. Give any one fact that denies management to be regarded as a profession ?
4. Principles of management are not exact as the principles, vocabulary of terms and concepts. Which feature of science is justified by management here ?
5. Anyone can be called a manager irrespective of the educational qualification possessed. Why ?
6. Division heads, operations manager comes under which level of management ?
7. Name the level of management engaged in
 - (a) Overseeing the activities of the worker
 - (b) taking key decisions
8. At which level of management the managers are responsible for the welfare and survival of the organization ?
9. Name the level of management at which the managers are responsible for implementing and controlling the plans and strategies of the organization ?
10. Why is it said that management principles have universal applicability ?
11. How have the management principles been derived ?
12. 'Management principles aim at influencing behavior of human beings' State the feature of management principle mentioned here ?
13. Which principle of Fayol leads to specialization ?
14. It aims at eliminating unnecessary diversity of products. Name this technique of scientific management?
15. It involves a change in the attitude of workers and management towards one another from competition to co-operation. Name it ?
16. Business environment includes both "specific and general forces". List any four specific forces ?
17. Why is it said that business environment is a 'relative concept' ?
18. Business environment helps the firms to identify threats and early warning signals. So you agree?
19. The understanding of business environment enables the firm to identify opportunities. What is meant by 'opportunities' here?

20. Just after declaration of Lok Sabha elections 2009 results, the Bombay stock exchanges price index rose by 2100 points in a day. Identify the environment factor which led to this rise?

21. Which environment prohibits the advertisement of alcoholic beverages ?

22. Technological environment includes new approaches to producing goods and services , new procedures as well as new equipment. Mention any one example to support it.

23. Management is neither as precise nor as comprehensive as the natural and pure sciences are why? Explain.

24. “Art is concerned with personal application of knowledge.” In the light of this statement compare the features of art with management to prove that it is an art ?

25. Ritu is a manager of northern division of a large corporate house. At what level does she work in the organisation ? what are the basic functions ?

26. ‘The application of principles of management is dependent on the prevailing situation at a particular point of time.’ State and explain the feature of management principle mentioned here ?

27. The subordinates in a company receive orders regarding their work from different operative heads for the same task. Which principle of management is being over looked and why ?

28. Mohan, a manager, expects his colleagues to get work out of subordinates and yet has a differential feature for each person. Which principle of management is being over looked and why ?

29. What does mental revolution imply in scientific management ?

30. Which principle of Taylor suggests that the job performed should be based on scientific enquiry not an institution? Name and explain in brief the principle

31. Briefly explain the following

(a) liberalization

(b) globalization

(c) privatization

32. Briefly discuss the impact of government policy changes on business and industries.

33. ‘In the absence of the productive resources will remain resources and shall never become production.’ Explain the importance management in the light of this statement.

34. What are the objectives of management ? What important role does management play in the success , efficiency and soundness of an organization.

35. Management has not yet gained the status of a full-hedged profession. Why ?

36. Explain by giving any five reasons why proper understanding of management principles is necessary.

37. Explain functional foremanship as a technique scientific management. Illustrate it with the help of a diagram?
38. Taylor's principle of management and Fayol's principles of management are mutually complementary. Do you agree with this view? Give any five reasons in support of your answer?
39. Discuss the differences between contributions of Taylor and Fayol.
41. 'Understanding of business environment gets a first mover advantage, as a warning signal for adverse conditions and sensitise the management.' Discuss.
42. Explain five economic changes initiated by the government of India since 1991 ?

Holidays Home Assignment (2014-15)
Accountancy Class-XII

General Instructions:

- a) *Holidays home work has been divided into two parts. Part A is assignment questions from Partnership Accounts and Part B is Comprehensive Project*
- b) *Holidays home work is to be done in a separate register including comprehensive project and is to be submitted on 1st July 2014*

PART-A (PARTNERSHIP ACCOUNTS)

1. A, B, C were partners in a firm sharing profits in 3:2:1 ratio. They admitted D for 10% profits. Calculate the new profit sharing ratio?
2. X and Y are partners sharing profits in 5:3 ratio admitted Z for $\frac{1}{10}$ share which he acquired equally for X and Y. Calculate new profit sharing ratio?
3. A, B and C are partners sharing profits in 2:2:1 ratio admitted D for $\frac{1}{8}$ share which he acquired entirely from A. Calculate new profit sharing ratio?
4. A, B and C were partners in a firm sharing profits in 3:3:2 ratio. They admitted D as a new partner for $\frac{4}{7}$ profit. D acquired his share $\frac{2}{7}$ from A, $\frac{1}{7}$ from B and $\frac{1}{7}$ from C. Calculate new profit sharing ratio?
5. Radha and Rukmani are partners in a firm sharing profits in 3:2 ratio. They admitted Gopi as a new partner. Radha surrendered $\frac{1}{3}$ of her share in favour of Gopi and Rukmani surrendered $\frac{1}{4}$ of her share in favour of Gopi. Calculate new profit sharing ratio?
6. Rao and Swami are partners in a firm sharing profits and losses in 3:2 ratio. They admit Ravi as a new partner for $\frac{1}{8}$ share in the profits. The new profit sharing ratio between Rao and Swami is 4:3. Calculate new profit sharing ratio and sacrificing ratio?
7. The books of Ram and Bharat showed that the capital employed on 31.12.2008 was ₹ 5,00,000 and the profits for the last 5 years : 2008 ₹40,000; 2009 ₹50,000; 2010 ₹55,000; 2011 ₹70,000 and 2012 ₹85,000. Calculate the value of goodwill on the basis of 3 years

purchase of the average super profits of the last 5 years assuming that the normal rate of return is 10%?

8. Rajan and Rajani are partners in a firm. Their capitals were Rajan ₹3,00,000; Rajani ₹2,00,000. During the year 2012 the firm earned a profit of ₹1,50,000. Calculate the value of goodwill of the firm assuming that the normal rate of return is 20%?

9. Rishi is a partner in a firm. He withdrew the following amounts during the year ended March 31, 2013.

May 01, 2012	₹ 12,000
July 31, 2012	₹ 6,000
September 30, 2012	₹ 9,000
November 30, 2012	₹ 12,000
January 01, 2013	₹ 8,000
March 31, 2013	₹ 7,000

Interest on drawings is charged @ 9% p.a. Calculate interest on drawings

10. Menon and Thomas are partners in a firm. They share profits equally. Their monthly drawings are ₹ 2,000 each. Interest on drawings is to be charged @ 10% p.a. Calculate interest on Menon's drawings for the year 2012, assuming that money is withdrawn:

- in the beginning of every month,
- in the middle of every month, and
- at the end of every month.

11. Sunflower and Pink Rose started partnership business on April 01, 2012 with capitals of ₹ 2,50,000 and ₹1,50,000, respectively. On October 01, 2012, they decided that their capitals should be ₹2,00,000 each. The necessary adjustments in the capitals are made by introducing or withdrawing cash. Interest on capital is to be allowed @ 10% p.a. Calculate interest on capital as on March 31, 2013.

12. Radha, Mary and Fatima are partners sharing profits in the ratio of 5:4:1. Fatima is given a guarantee that her share of profit, in any year will not be less than ₹5,000. The profits for the year ending March 31, 2012 amounts to ₹35,000. Shortfall if any, in the profits guaranteed to Fatima is to be borne by Radha and Mary in the ratio of 3:2. Record necessary journal entry to show distributioin of profit among partner.

13. The firm of Harry, Porter and Ali, who have been sharing profits in the ratio of 2 : 2 : 1, have existed for same years. Ali wants that he should get equal share in the profits with Harry and Porter and he further wishes that the change in the profit sharing ratio should come into effect retrospectively were for the last three year. Harry and Porter have agreement on this account. The profits for the last three years were:

	(₹)
2009-10	22,000
2010-11	24,000
2011-12	29,000

Show adjustment of profits by means of a single adjustment journal entry.

14. Harshad and Dhiman are in partnership since April 01, 2012. No Partnership agreement was made. They contributed ₹4,00,000 and ₹1,00,000 respectively as capital. In addition, Harshad advanced an amount of ₹1,00,000 to the firm, on October 01, 2012. Due to long illness, Harshad could not participate in business activities from August 1, to September 30,

2012. The profits for the year ended March 31, 2012 amounted to ₹1,80,000. Dispute has arisen between Harshad and Dhiman.

Harshad Claims:

- (i) he should be given interest @ 10% per annum on capital and loan;
- (ii) Profit should be distributed in proportion of capital;

Dhiman Claims:

- (i) Profits should be distributed equally;
- (ii) He should be allowed ₹2,000 p.m. as remuneration for the period he managed the business, in the absence of Harshad;
- (iii) Interest on Capital and loan should be allowed @ 6% p.a.

You are required to settle the dispute between Harshad and Dhiman. Also prepare Profit and Loss Appropriation Account.

15. Anubha and Kajal are partners of a firm sharing profits and losses in the ratio of 2:1. Their capital, were ₹90,000 and ₹60,000. The profit during the year were ₹45,000. According to partnership deed, both partners are allowed salary, ₹700 per month to Anubha and ₹500 per month to Kajal. Interest allowed on capital @ 5%p.a. The drawings at the end of the period were ₹8,500 for Anubha and ₹6,500 for Kajal. Interest is to be charged @ 5% p.a. on drawings. Prepare Profit & Loss Appropriation A/c and Partners Capital A/cs, assuming that the capital accounts are fluctuating.

16. The partnership agreement between Maneesh and Girish provides that:
 - (i) Profits will be shared equally;
 - (ii) Maneesh will be allowed a salary of ₹400 p.m;
 - (iii) Girish who manages the sales department will be allowed a commission equal to 10% of the net profits, after allowing Maneesh's salary;
 - (iv) 7% interest will be allowed on partner's fixed capital;
 - (v) 5% interest will be charged on partner's annual drawings;
 - (vi) The fixed capitals of Maneesh and Girish are ₹1,00,000 and Rs. 80,000, respectively. Their annual drawings were ₹16,000 and 14,000, respectively. The net profit for the year ending March 31, 2012 amounted to ₹40,000; Prepare firm's Profit and Loss Appropriation Account.

17. Simmi and Sonu are partners in a firm, sharing profits and losses in the ratio of 3:1. The profit and loss account of the firm for the year ending March 31, 2012 shows a net profit of ₹1,50,000. Prepare the Profit and Loss Appropriation Account by taking into consideration the following information:
 - (i) Partners capital on April 1, 2011;
Simmi, ₹30,000; Sonu, ₹60,000;
 - (ii) Current accounts balances on April 1, 2011;
Simmi, ₹30,000 (cr.); Sonu, ₹15,000 (cr.);
 - (iii) Partners drawings during the year amounted to
Simmi, ₹20,000; Sonu, ₹15,000;
 - (iv) Interest on capital was allowed @ 5% p.a.;
 - (v) Interest on drawing was to be charged @ 6% p.a. at an average of six months;

- (vi) Partners' salaries : Simmi ₹12,000 and Sonu ₹9,000. Also show the partners' current accounts.
18. Verma and Sharma are partners in a firm sharing profits and losses in the ratio of 5:3. They admitted Ghosh as a new partner for $\frac{1}{5}$ share of profits. Ghosh is to bring in ₹20,000 as capital and ₹4,000 as his share of goodwill premium. Give the necessary journal entries:
 - a) When the amount of goodwill is retained in the business.
 - b) When the amount of goodwill is fully withdrawn.
 - c) When 50% of the amount of goodwill is withdrawn.
 - d) When goodwill is paid privately.
 19. Aditya and Balan are partners sharing profits and losses in 3:2 ratio. They admitted Christopher for $\frac{1}{4}$ share in the profits. The new profit sharing ratio agreed was 2:1:1. Christopher brought ₹50,000 for his capital. His share of goodwill was agreed to at ₹15,000. Christopher could bring only ₹10,000 out of his share of goodwill. Record necessary journal entries in the books of the firm?
 20. Amar and Samar were partners in a firm sharing profits and losses in 3:1 ratio. They admitted Kanwar for $\frac{1}{4}$ share of profits. Kanwar could not bring his share of goodwill premium in cash. The Goodwill of the firm was valued at ₹80,000 on Kanwar's admission. Record necessary journal entry for goodwill on Kanwar's admission.
 21. A and B are partners sharing profits and losses in the ratio of 3:1. On 1st Jan. 2013 they admitted C as a new partner for $\frac{1}{4}$ share in the profits of the firm. C brings ₹20,000 as for his $\frac{1}{4}$ share in the profits of the firm. The capitals of A and B after all adjustments in respect of goodwill, revaluation of assets and liabilities, etc. has been worked out at ₹50,000 for A and ₹12,000 for B. It is agreed that partner's capitals will be according to new profit sharing ratio. Calculate the new capitals of A and B and pass the necessary journal entries assuming that A and B brought in or withdrew the necessary cash as the case may be for making their capitals in proportion to their profit sharing ratio?
 22. Pinky, Qumar and Roopa partners in a firm sharing profits and losses in the ratio of 3:2:1. S is admitted as a new partner for $\frac{1}{4}$ share in the profits of the firm, whichs he gets $\frac{1}{8}$ from Pinky, and $\frac{1}{16}$ each from Qmar and Roopa. The total capital of the new firm after Seema's admission will be ₹2,40,000. Seema is required to bring in cash equal to $\frac{1}{4}$ of the total capital of the new firm. The capitals of the old partners also have to be adjusted in proportion of their profit sharing ratio. The capitals of Pinky, Qumar and Roopa after all adjustments in respect of goodwill and revaluation of assets and liabilities have been made are Pinky ₹80,000, Qumar ₹30,000 and Roopa ₹20,000. Calculate the capitals of all the partners and record the necessary journal entries for doing adjustments in respect of capitals according to the agreement between the partners?
 23. The following was the Balance Sheet of Arun, Bablu and Chetan sharing profits and losses in the ratio of $\frac{6}{14} : \frac{5}{14} : \frac{3}{14}$ respectively.

<i>Liabilities</i>	<i>Amount (Rs.)</i>	<i>Assets</i>	<i>Amount (Rs.)</i>
Creditors	9,000	Land and Buildings	24,000
Bills Payable	3,000	Furniture	3,500
Capital Accounts		Stock	14,000
Arun	19,000	Debitors	12,600
Bablu	16,000	Cash	900
Chetan	<u>8,000</u>		
	43,000		
	55,000		55,000

They agreed to take Deepak into partnership and give him a share of 1/8 on the following terms: (a) that Deepak should bring in ₹4,200 as goodwill and ₹7,000 as his Capital; (b) that furniture be depreciated by 12%; (c) that stock be depreciated by 10% (d) that a Reserve of 5% be created for doubtful debts: (e) that the value of land and buildings having appreciated be brought upto ₹31,000 ;(f) that after making the adjustments the capital accounts of the old partners (who continue to share in the same proportion as before) be adjusted on the basis of the proportion of Deepak's Capital to his share in the business, i.e., actual cash to be paid off to, or brought in by the old partners as the case may be.

Prepare Cash Account, Profit and Loss Adjustment Account (Revaluation Account) and the Opening Balance Sheet of the new firm.

24. Azad and Babli are partners in a firm sharing profits and losses in the ratio of 2:1. Chintan is admitted into the firm with 1/4 share in profits. Chintan will bring in ₹30,000 as his capital and the capitals of Azad and Babli are to be adjusted in the profit sharing ratio. The Balance Sheet of Azad and Babli as on December 31, 2012 (before Chintan's admission) was as follows:

Balance Sheet of A and B as on 31.12.2012

<i>Liabilities</i>	<i>Amount (Rs.)</i>	<i>Assets</i>	<i>Amount (Rs.)</i>
Creditors	8,000	Cash in hand	2,000
Bills payable	4,000	Cash at bank	10,000
General reserve	6,000	Sundry debtors	8,000
Capital accounts:		Stock	10,000
Azad	50,000	Furniture	5,000
Babli	<u>32,000</u>	Machinery	25,000
	82,000	Buildings	40,000
	1,00,000		1,00,000

It was agreed that:

- i) Chintan will bring in ₹12,000 as his share of goodwill premium.
- ii) Buildings were valued at ₹45,000 and Machinery at ₹23,000.
- iii) A provision for doubtful debts is to be created @ 6% on debtors.

iv) The capital accounts of Azad and Babli are to be adjusted by opening current accounts.

Record necessary journal entries, show necessary ledger accounts and prepare the Balance Sheet after admission.

25. Ashish and Dutta were partners in a firm sharing profits in 3:2 ratio. On Jan. 01, 2013 they admitted Vimal for 1/5 share in the profits. The Balance Sheet of Ashish and Dutta as on Jan. 01, 2013 was as follows:

Balance Sheet of A and B as on 1.1.2013

<i>Liabilities</i>	<i>Amount (Rs.)</i>	<i>Assets</i>	<i>Amount (Rs.)</i>
Creditors	15,000	Land & Building	35,000
Bills Payable	10,000	Plant	45,000
Ashish Capital	80,000	Debtors	22,000
Dutta's Capital	35,000	Less : Provision	<u>2,000</u>
		Stock	35,000
		Cash	5,000
	1,40,000		1,40,000

It was agreed that:

- i) The value of Land and Building be increased by ₹15,000.
- ii) The value of plant be increased by 10,000.
- iii) Goodwill of the firm be valued at ₹20,000.
- iv) Vimal to bring in capital to the extent of 1/5th of the total capital of the new firm.

Record the necessary journal entries and prepare the Balance Sheet of the firm after Vimal's admission.

PART-B (COMPREHENSIVE PROJECT)

Guidelines for making Comprehensive Project

1. Select a business form from the following list of options:
 - (i) A beauty parlour
 - (ii) Men's saloon
 - (iii) A tailoring shop
 - (iv) A canteen
 - (v) A cake shop
 - (vi) A confectionery shop
 - (vii) A chocolate shop
 - (viii) A dry cleaner
 - (ix) A stationery shop
 - (x) Men's wear
 - (xi) Ladies wear
 - (xii) Kiddies wear
 - (xiii) A saree shop

- (xiv) Artificial jewellery shop
- (xv) A small restaurant
- (xvi) A sweet shop
- (xvii) A grocery shop
- (xviii) A shoe shop
- (xix) A coffee shop
- (xx) A music shop
- (xxi) A juice shop
- (xxii) A school canteen
- (xxiii) An ice cream parlour
- (xxiv) A sandwich shop
- (xxv) A flower shop

Sanction a capital amount for business.

After selection, you should see a shop in the locality (this will help to settle on a realistic amount for rent). You would be able see the things required to invest in (Furniture, décor, lights, machines, computers.....)

As you are familiar with the various types of accounts, it will help you to list the accounts with realistic figures (add to the list below)

- (i) Rent
- (ii) Advance rent (approximately three months)
- (iii) Electricity deposit
- (iv) Electricity bill
- (v) Water bill
- (vi) Water deposit
- (vii) Water fittings
- (viii) Telephone bill
- (ix) Telephone instrument
- (x) Furniture
- (xi) Computers
- (xii) Internet connection
- (xiii) Stationery
- (xiv) Advertisement
- (xv) Glow sign
- (xvi) Hoarding
- (xvii) Prayer porting
- (xviii) Newspaper and magazines
- (xix) Pretty expenses
- (xx) Tea expenses
- (xxi) Packaging expenses
- (xxii) Transport
- (xxiii) Delivery cycle or a vehicle purchased
- (xxiv) Registration
- (xxv) Insurance
- (xxvi) Auditors fee
- (xxvii) Maintenance
- (xxviii) Repairs
- (xxix) Air conditioners
- (xxx) Fans and lights

- (xxxi) Interior decorations
- (xxxii) Refrigerators

These are a few of the common expenses

Now think about the sales figures for the year

And divide by 360 to get an average figure for the sales for the day

This would be a very nice reality check and then accordingly change the annual sales figure.

Prepare a worksheet in the form of a Cash Book statement like

To Capital		By Salaries	
To Sales		By Rent	
		By Purchase	
		By Electricity	
		By Advertisement	
		By Balance c/d	

- Write all the items of payments on the credit side
- Write the figure as realistic as possible
- Get a Cash Book Balance
- Make a Trial Balance for the Cash Book
- This should be very simple because all debits of cash book will go to the credit side of Trial Balance
- And all credits of Cash Book will go to the debit side of Trial Balance.

Particulars	Dr.	Cr.
Capital		
Cash		
Purchases		
Sales		
Electricity		
Salaries		
Rent		
Advertisement		

- Break up the cash balance into cash in hand, bank balance.
- Cash in hand need not be more than 2 days of sale (helps to relate liquidity and profitability).
- Once the trial balance tallies a lot of problems are taken care of.
- Now introduce the following four concepts.
 1. Debtors
 2. Creditors
 3. Purchase Return
 4. Sales return

Interestingly the above can be shown as

1. Debtors -3,00,000 add Dr side of Trial Balance and increase sales on the Cr side of Trial Balance
2. Creditors- 1,50,000a add Cr side of Trial Balance and increase purchases on the Dr side of Trial Balance.
3. Purchases return- add Cr side of Trial Balance and reduce creditors Cr side of Trial Balance [Same Side].
4. Sales return- add Dr side of Trial Balance and reduce debtors Dr side of Trial Balance.

Hence the Trial balance tallies once again.

Now put in adjustments:

This can be five OR more from the following

1. Closing Stock
 - Sweet shop/cake shop 1-2 days
 - In case of perishable goods around 2-3 days of purchase
 - Fashion items 2 months of purchase
 - Iron of wooden furniture- it can be 5 months also
2. Depreciation
 - All the fixed assets need to be depreciated
 - Depreciation should be related to their life span e.g. furniture of commercial shop as per the standards today changes in five years hence 20%.
 - Computers obsolete in 3 yrs hence 33- 1/3%.
 - Air conditioners say 10 yrs therefore 10% as the spans are different the rate can also be different as per logic
3. Outstanding expenses
4. Advances paid- very appropriate for rent/insurance
5. Bad Debt
6. Provision for bad and doubtful debts
7. Items for deferred revenue expenditure

With the support of the 'Cash Book' and Trial Balance (with Creditors, Debtors, Purchase Returns, Sales Returns) without adjustment prepare:

1. Comprehensive Story
2. Journal Entries
3. Ledger Accounts
4. Cash Book
5. Trial Balance
6. Adjustment Entries
7. Trading and Profit & Loss Account
8. Balance Sheet

This project work gives you an opportunity to peep into the real business world and observe and record activities going on there. Observation and process of investigation

- Independent thinking
- Presentation skills
- Co-relation

- Comprehending

Sample Comprehensive Project Problem

Ram and Raghav were twin brothers. Ram was interested in computers and would find time to always work on computers either at college or at his friend's place. His keen interest in the subject made him take up computer software for his degree course. He pleaded with his father Rangan and purchased a computer for his use at home. Raghav was always interested in sitting at his fathers' shop at the nearby market place selling electrical appliances. He would often go and help his father at the shop after college hours.

Mr. Rangan was happy that Raghav showed keen interest in his business but was worried about Ram who would always spend time with computers.

He felt that if the interest of the two sons be put together they could start a flourishing business of their own. The boom in the IT industry made him find ways to satisfy his sons' dreams.

After college, the twins were drifting apart due to varied interests. Rangan decided that this is the time for him to intervene and make decisions for them.

He decided to start a computer business for his sons.

He asked Raghav, a commerce graduate to draw up a proposal for the same.

Raghav came out with the following ideas:-

The area they lived in and run shop consisted of middle income group families and many of them did not possess computers at home.

Their shop could provide the following services:-

- Computer classes for various age groups.
- Computer using facilities on payment per hourly basis and printing of documents from computers
- Internet access facility at the prevailing market rates by entering into contract with VSNL.
- Computer games corner for children.

Ram jumped at the idea and they made up a common proposal. Ram wanted that they purchase 10 computers and start with first two areas of operation and expand when things go well.

The shop they had at the market place was a single storey building. Their father offered to build the first floor and give it to them for their business. He spent ₹ 1,00,000 on construction of the facility and gave them ₹ 2,50,000 for the business. The sons went to a bank and put up their proposal and managed to get a loan to the extent of 75 percent of the cost of computers with printers i.e. ₹ 4,00,000. As the bank manager was aware of the creditworthiness of Rangan, he advanced the loan of ₹ 3,00,000. Total amount to be repaid will be ₹ 3,60,000 including interest in three annual instalments as follows:-

- End of the first year = ₹ 1,30,000 (₹ 1,00,000 + 30,000 interest)
- End of the 2nd year = ₹ 1,20,000 (₹ 1,00,000 + 20,000 interest)
- End of the 3rd year = ₹ 1,10,000 (₹ 1,00,000 + 10,000 interest)

They started business on 1st April 2005. Raghav decided to deposit ₹ 2,40,000 in the bank.

They gave ₹ 1,00,000 to computer company as 25% of the value of computers purchased and ₹ 3,00,000 out of bank loan availed. They deposited ₹ 1,000 for the electrical connection with the Electricity Board. They paid a deposit of ₹ 1,00,000 with VSNL for the Internet connection. They used the telephone connection at the shop, as there were two connections at the shop. They got the computer café furnished by paying ₹ 25,000. Raghav got pamphlets printed and distributed at the cost of ₹ 45,00 in the surrounding colonies.

All payments were to be made by cheques. All the receipts were in cash to be deposited in the bank on the same day.

The students on an average paid a monthly fee of ₹ 500 for the three month computer evening classes.

There were a number of internet subscribers and receipts on account of internet facility was ₹ 10,000 a month in the first quarter on an average. They decided to buy and sell computer stationery also like floppy discs, CDs, etc.

At the end of the year, their results showed the following:-

- Total revenue including sale of computer stationery	4,98,000
- Purchases of computer stationery	55,000
- Electricity charges yet to be paid.	1,24,000
- Telephone charges	34,000
- Petty expenses	12,000
- Entertainment expenses	10,000
- Maintenance expenses	10,000

There was a helper at their father's shop who agreed to clean up the computer café and fetch water to visitors. For the additional services, he was paid ₹ 500 per month.

They withdrew ₹ 3,000 by cheque each month for their personal expenses. They paid the bank loan regularly.

Father was pleased at his sons' efficiency.

He wanted to expand business.

- (i) Journalize the above transactions. Post them into the ledger and prepare trial balance.
 - (ii) Prepare Profit & Loss A/c and Balance Sheet.
 - (iii) Charge depreciation at the rate of 25% on computers, 10% on furniture and 5% on buildings.
 - (iv) Calculate profitability ratios.
 - (v) They approached the bank for further loan. Compute the ratios that the banker will require before granting the loan. (Current ratio, quick ratio and debt equity ratio).
 - (vi) Comment on the efficiency of the business if the net profit ratio and gross profit ratio in similar type of business concerns are 20% and 50% respectively.
-

PHYSICAL EDUCATION

1. From the following 7 games / sports choose one game of your choice.
Athletics, Basketball, Football, Handball, Hockey, Kho-Kho and Volleyball.
 - (a) Draw a neat diagram of the field/court.
 - (b) Write its history.
 - (c) Write its rules and regulations.
 - (d) Terminologies
 - (e) Important Tournaments
 2. From the one game of your choice. Write all skills of that particular game. Paste pictures also depicting the skills.
 3. Write any 5 Asanas and explain the benefits of each Asana.
-

Holiday Homework : Painting Class XII

5X Object Drawing

1. 3 or 4 Cosmetic Objects (Shampoo Bottle, Telecom Powder Box ,Perfume Bottle etc.)
2. Umbrella Shoe, Bricks.
3. Shoe Box ,Sports Shoe and Printed fabric.
4. Sprite (green) Bottle 3 Litre, one glass and one glass lying down.
5. Kettle , Cup ,Mug and spoons.

COMPOSITION

1. Flying Kites
 2. Black Smith (Single Figure)
 3. Cobbler with five Figure
 4. Village Scene with five Figures
 5. Children playing with Sand at the Sea Beach.
-

FOOD PRODUCTION 3 & 4

1. Complete your practical file.
 2. Prepare any two regional dish and write down their recipe.
 3. Visit any bakery shop and find out various breads, pastries, puddings or any kind of special dish of that shop. [Please take pictures of any one]
 4. Revise and learn all the chapters done in the class.
 5. Complete all the extra questions / assignment given.
-

HOME SCIENCE

1. Visit an old age home, spend a day there and observe needs and problems of old people. Write a report on it.
 2. List and discuss four to five areas of agreement and disagreement of self with mother, sibling, father, friends and teachers.
 3. Prepare a sewing kit.
 4. Prepare and write the recipes for the following:
 - (a) Sprouted Dal
 - (b) Cake of your Choice
 - (c) Any One Mocktail
 5. Complete the assignment given in the class.
 6. Revise and learn all the chapters covered in the class.
-

Computer Science - XII**Topics covered**

- 1) **SQL**
- 2) **Classes and objects**
- 3) **Constructors and destructors**
- 4) **Review of class XI**
- 5) **Networking**

1. Consider the following tables FACULTY and COURSES. Write SQL commands for the statements (i) to (v) and give outputs for SQL queries (vi) to (viii)

FACULTY

F_ID	Fname	Lname	Hire_date	Salary
102	Amit	Mishra	12-10-1998	12000
103	Nitin	Vyas	24-12-1994	8000
104	Rakshit	Soni	18-5-2001	14000
105	Rashmi	Malhotra	11-9-2004	11000
106	Sulekha	Srivastava	5-6-2006	10000
107	Niranjan	Kumar	26-8-1996	16000

COURSES

C_ID	F_ID	Cname	Fees
C21	102	Grid Computing	40000
C22	106	System Design	16000
C23	104	Computer Security	8000
C24	106	Human Biology	15000
C25	102	Computer Network	20000
C26	105	Visual Basic	6000
C27	107	Dreamweaver	4000

- i) To display details of those Faculties whose salary is greater than 12000.
- ii) To display the details of courses whose fees is in the range of 15000 to 50000 (both values included).
- iii) To increase the fees of all courses by 500.
- iv) To display details of those courses which are taught by 'Sulekha'.
- v) To display name of the Faculty whose salary is maximum.

- vi) Select COUNT(DISTINCT F_ID) from COURSES;
- vii) Select MIN(Salary) from FACULTY,COURSES where COURSES.C_ID = FACULTY.F_ID;
- viii) Select SUM(Fees) from courses Group By F_ID having count(*) > 1;
- ix) Select Fname, Lname from FACULTY Where Lname like "M%";

2. Study the following tables DOCTOR and SALARY and write SQL commands for the questions (i) to (iv) and give outputs for SQL queries (v) to (vi):

TABLE : DOCTOR

ID	NAME	DEPT	SEX	EXPERIENCE
101	John	ENT	M	12
104	Smith	ORTHOPEDIC	M	5
107	George	CARDIOLOGY	M	10
114	Lara	SKIN	F	3
109	K George	MEDICINE	F	9
105	Johnson	ORTHOPEDIC	M	10
117	Lucy	ENT	F	3
111	Bill	MEDICINE	F	12
130	Morphy	ORTHOPEDIC	M	15

TABLE : SALARY

ID	BASIC	ALLOWANCE	CONSULTATION
101	12000	1000	300
104	23000	2300	500
107	32000	4000	500
114	12000	5200	100
109	42000	1700	200

105	18900	1690	300
130	21700	2600	300

- i) Display NAME of all doctors who are in “MEDICINE” having more than 10 years experience from the table DOCTOR.
 - ii) Display the average salary of all doctors working in “ENT” department using the tables DOCTOR and SALARY. Salary = BASIC + ALLOWANCE
 - iii) Display the minimum ALLOWANCE of female doctors.
 - iv) Display the highest consultation fee among all male doctors.
 - v) To display records of all the doctors in ascending order of experience.
 - vi) SELECT count(*) from DOCTOR where SEX = “F”
 - vii) SELECT NAME, DEPT, BASIC from DOCTOR, SALARY where DEPT = “ENT” and DOCTOR.ID = SALARY.ID
3. Define a class named ADMISSION in C++ with the following descriptions:

Private members:

AD_NO integer (Ranges 10 - 2000)

NAME Array of characters (String)

CLASS Character

FEES Float

Public Members:

- Function Read_Data () to read an object of ADMISSION type
- Function Display() to display the details of an object
- Function Draw_Nos () to choose 2 students randomly.
- And display the details. Use random function to generate admission nos. to match with AD_NO.

4. Define a class **Employee** in C++ with the following specification:

Private Members:

ename an array of char of size[50] (represent employee name)

deptname an array of char of size[20] (represent department name)

salary integer (represent total salary of an employee)

bonus float

CalBonus() This function calculate the total bonus given to an employee according to following conditions

Deptname	Bonus
Accounts	4 % of salary
HR	5% of salary
IT	2% of salary
Sales	3% of salary
Marketing	4% of salary

Public Members:

- Constructor to initialise ename and deptname to NULL and salary and bonus to 0.
- A function read_info to allow user to enter values for ename, deptname,salary & Call function CalBonus() to calculate the bonus of an employee.
- A Function disp_info() to allow user to view the content of all the data members

5. Define a class **Directory** with the following Specification:

Private members:

Docunames an array of string of size [10][25]

(to represent all the names of Documents inside Directory)

Freespace long (to represent total number of bytes available in Directory)

Occupied long (to represent total number of bytes used in Directory)

Public members

Newdocumentry() A function to accept values of Docunames, Freespace
and Occupied from user.

Retfreespace() A function that returns the values of total kilobytes available
(1 Kilobyte= 1024 bytes)

Showfiles () A function that display the names of all the documents in directory

6. Find the output of the following program:

- a. `#include<iostream.h>`
 `void main()`
 `{ long Number = 7583241;`
 `int First=0, Second=0;`
 `do`
 `{ int R=Number%10;`
 `if (R%2==0)`
 `First+=R;`
 `else`
 `Second+=R;`
 `Number /=10;`
 `} while (Number>0);`
 `cout<<First-Second;`
 `}`
- b. `#include<string.h>`
 `#include<iostream.h>`
 `#include<ctype.h>`
 `void change(char msg[], int len)`
 `{`

```

    for( int count=0;count< len;count++)
    {
        if(islower(msg[ count]))
            msg[count]=toupper(msg[count]);
        else if(isupper(msg[ count]))
            msg[count]=tolower(msg[count]);
        else if(isdigit(msg[ count]))
            msg[count]=msg[count]+1;
        else
            msg[count]= '*';
    }
}

void main( )
{
    char message[ ]= " 15th AugusT CelebratED";
    int size= strlen( message);
    change(message,size);
    cout<<message<<endl;
    for( int c=0;,r=size-1;c<=size/2; c++,r--)
    {
        char temp=message[c];
        message[c]=message[r];
        message[r]=temp;
    }
    cout<<message<<endl;
}

```

c.

```

#include<iostream.h>
int func( int &x,int y=10)
{
    if(x%y==0) return ++X; else return y- -;
}

void main( )
{
    int p=20, q=23;
    q= func(p,q);
    cout<<p<<q<<endl;
    p= func(q);
    cout<<p<<q<<endl;
    q= func(p);
    cout<<p<<q<<endl;
}

```

d.

```

# include < iostream.h>

void Withdef (int HisNum = 30)

```

```

{
for (int I=20 ; I<*= HisNum; I+=5)
cout<<I<<" ";
cout<<endl;
}

void Control (int &MyNum)
{
MyNum+=10;
Withdef(MyNum);
}

void main ()
{
int YourNum=20;
Control (YourNum);
Withdef();
cout<<"Number="<<YourNum<<endl;
}

```

e. #include <iostream.h>

```

struct Pixel
{
    int c,r;
};

void display(Pixel p)
{
    cout<<"Col "<<p.c<<" Row "<<p.r<<endl;
}

void main()

```



```

{
    Pixel x = {40,50}, y, z;

    z = x;

    x.c = x.c + 10;

    y = z;

    y.c = y.c + ;

    y.r = y.r + 20;

    z.c = z.c - 15;

    display(x);

    display(y);

    display(z);

}

```

7. Rewrite the following program after removing the syntactical error , if any. Under line each correction.

```

i) #include<iostream.h>
    const int Devidor 5;
    void amin( )

    {

        Number=15; for(int count=1;
        count<=5;count++) if( Number/ Devidor= = 0)
        cout<<Number/Devidor; cout<<endl;

        Else
        cout<< Number+Devidor<<endl;
    }

```

```

ii)      # include <iostream.h>

const int Max 10;

void main ( )

{

int Numbers [Max];

Numbers = { 20, 50,10, 30,40 } ;

for (Loc= Max-1 ; Loc > = 0 ; Loc - -)

```

```
cout<<Numbers [Loc]; }
```

8. In the following C++ program what is the expected value of Myscore from Options (i) to (iv) given below. Justify your answer.

a.

```
#include<stdlib.h>

#include<iostream.h>

void main( )

{

randomize();

int Score[] = {25,20,34,56, 72, 63}, Myscore;

Myscore = Score[2 + random(2)];

cout<<Myscore<<endl; }
```

(i) 25

(ii) 34

(iii) 20

(iv) None of the above

b. Observe the following program RANDNUM.CPP carefully. If the value of VAL entered by the user is 10, choose the correct possible output(s) from the options from i) to iv) and justify your option.

```
//program RANDNUM.CPP

#include<iostream.h>

#include<stdlib.h>

#include<time.h>

void main()

{

    randomize();

    int VAL, Rnd; int n=1;

    cin>>VAL;

    Rnd=8 + random(VAL) * 1;

    while(n<=Rnd)

    {
```

```

        cout<<n<<"\t";

        n++;

    }

}

```

output options:

i) 1 2 3 4 5 6 7 8 9 10 11 12 13

ii) 0 1 2 3

iii) 1 2 3 4 5

iv) 1 2 3 4 5 6 7 8

9. Define the following:

- a) Primary Key b) Candidate Key c) Alternate Key d) Foreign Key e) Tuple
 f) Attribute g) Cardinality h) Degree i) Relation.

10. List any four advantages of DBMS.

11. List any for RDBMS packages.

12. Answer the questions i) and ii) after going through the following class :

```
#include<iostream.h>
```

```
#include<string.h>
```

```
#include<stdio.h>
```

```
class wholesale
```

```
{ char categ[20],item[30];
```

```
float pr;
```

```
int qty;
```

```
wholesale( )                      // Function 1
```

```
{ strcpy(categ ,"Food");
```

```
strcpy(item,"Biscuits");
```

```
pr=150.00;
```

```
qty=10 }
```

```
public :
```

```
void SHOW( )                      //Function 2
```

```

        {
            cout<<categ<<"#"<<item<<":"<<pr<<"@"<<qty<<endl;
        }
    };

    void main( )
    {
        wholesale ob;                                //Statement 1
        ob.SHOW( );                                    //Statement 2
    }

```

i) Will **statement 1** initialize all the data members for object **ob** with the values given in **function 1**?(Y/N). Justify your answer suggesting the corrections to be made in the above code.

ii) What shall be the possible output when the program gets executed? (Assuming, if required- the suggested correction(s) are made in the program.

13. Answer the questions (i) and (ii) after going through the following program:

```

class Match
{
    int Time;

public:
    Match()      //Function 1
    {
        Time = 0;
        cout<<"Match commences "<<endl;
    }

    void Details() //Function 2
    {
        cout<<"Inter Section Basketball Match"<<endl;
    }

    Match(int Duration) //Function 3
    {
        Time = Duration;
        cout<<"Another match begins now"<<endl;
    }
}

```

```

    }

    Match(Match &M)    //Function 4

    {

        Time = M.Duration;

        Cout<<"Like Previous Match"<<endl;

    }

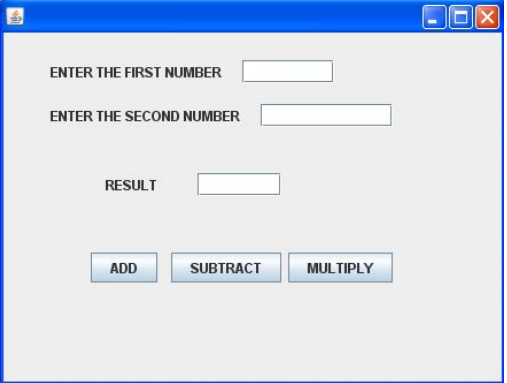

};

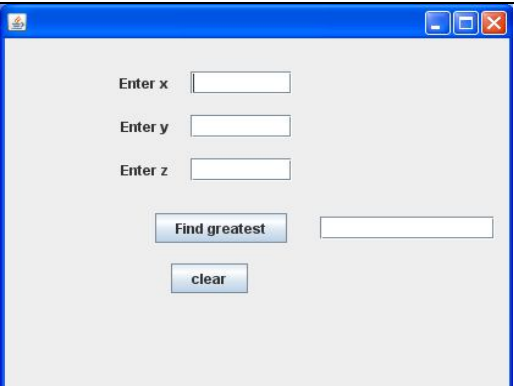

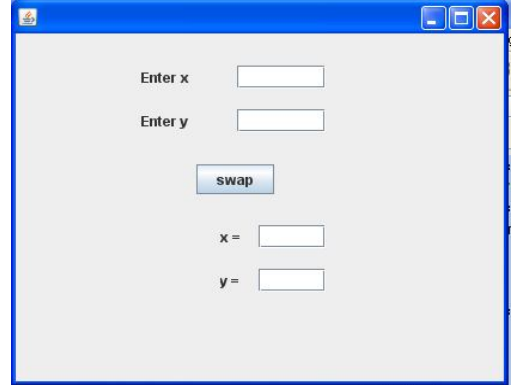
```

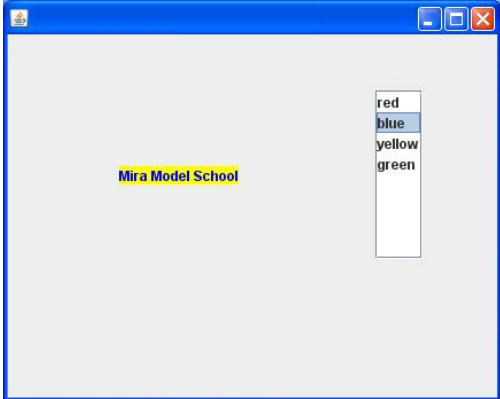
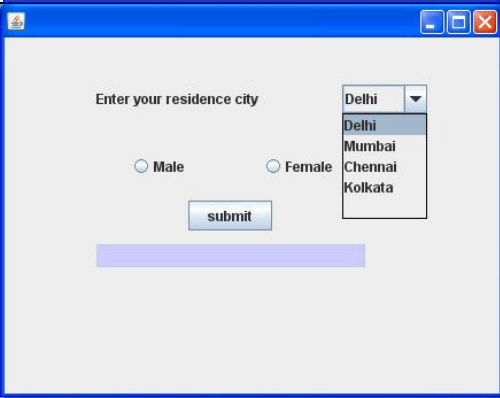
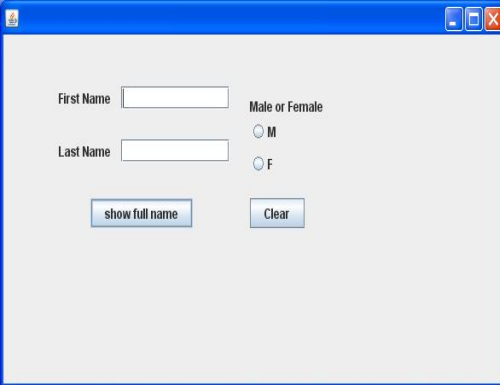
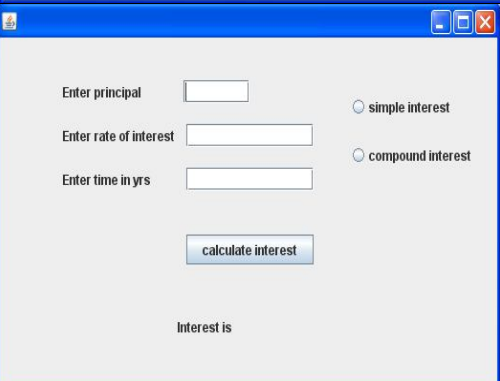
- i) Which category of constructor – Function 4 belongs to and what is the purpose of using it?
- ii) Write statements that would call the member Functions 1 and 3.

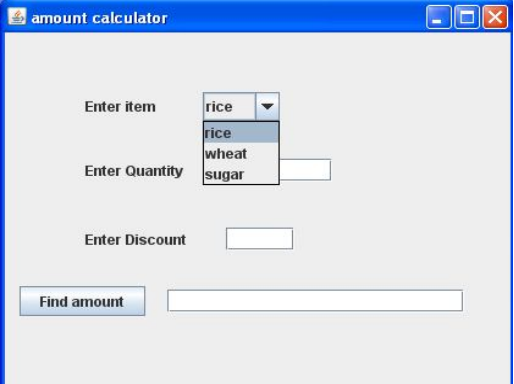
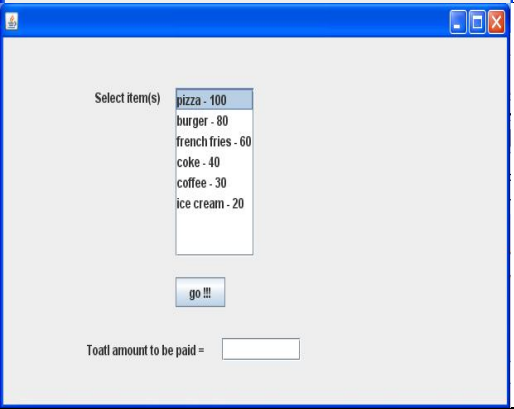
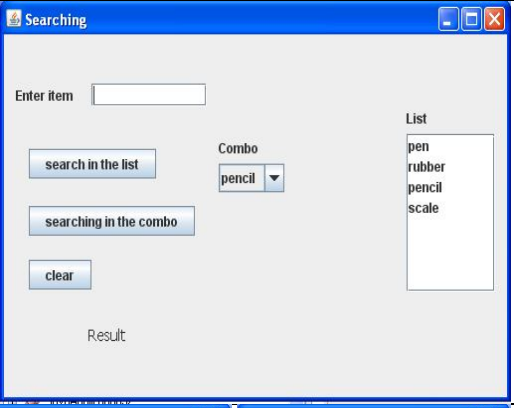
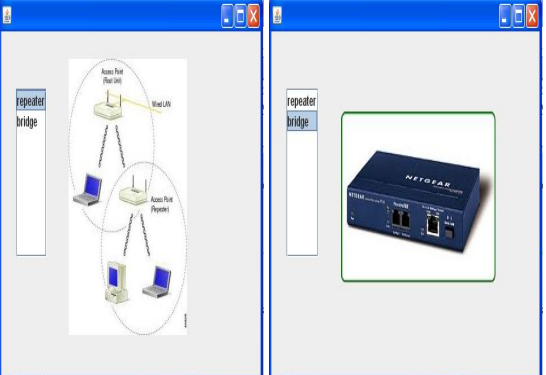
14.. Revise the notes of networking.

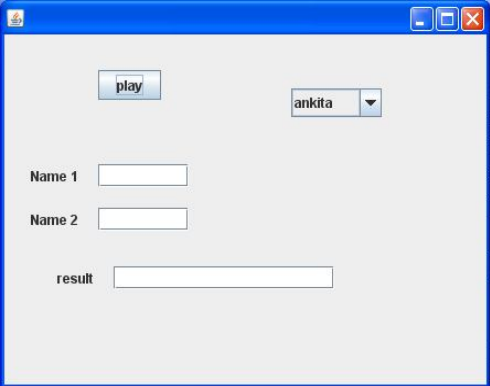
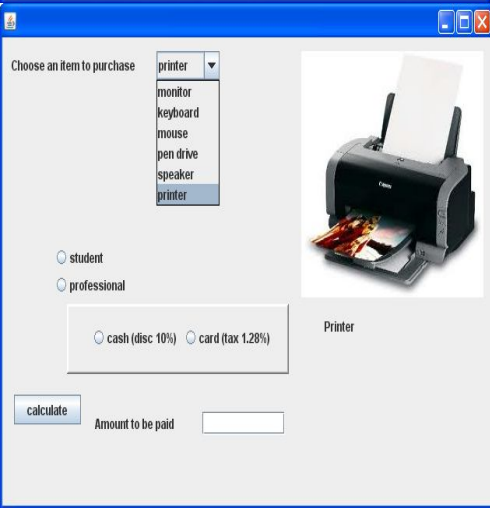
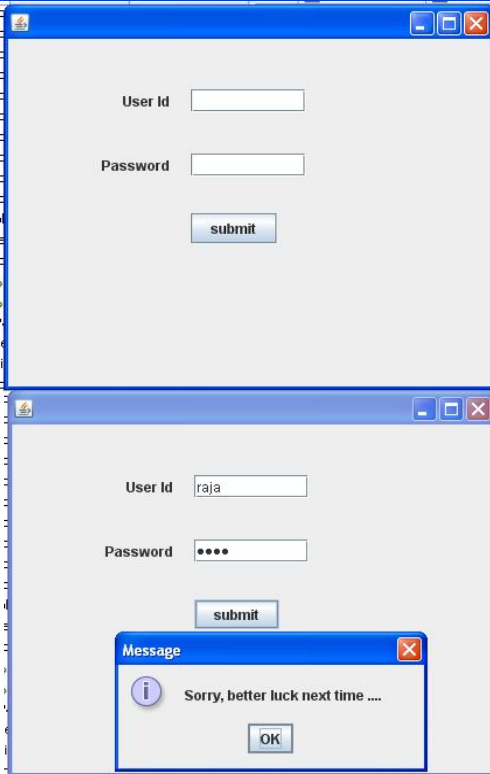
HOLIDAY HOMEWORK – IP- 2014

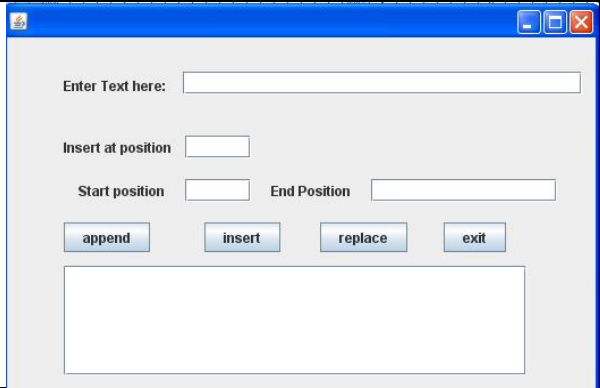
1	Write a java application to find the sum, difference and product of 2 integers.	
2	Write a java application to input name and age, if the age is less than 18 then display in a label "not eligible for voting" else display "eligible for voting".	

3	Write a java application to find the maximum of three integers entered by the user.	
4	Write a java application to enter thname and the qualified exam(s), so that the display is as "You are eligible for a Graduate course and a diploma course/not eligible for a diploma course/only eligible for a diploma course.	
5	Write a java application to swap two integers x and y input by the user.	
6	Write a java program to find the sum of even and odd integers out of n integers input by the user.(use for loop)	
7	Write a java program to find the sum of the digits of a number.(use while loop)	
8	Write a java program to input a number and check whether it is prime or not	
9	Write a java program to generate a pattern when the number of lines is input by the user.(use nested loop) N=5 <div style="text-align: center;"> 5 5 4 5 4 3 5 4 3 2 5 4 3 2 1 </div>	

10	Write a java application to display the text in the text box in the color selected from the list box (single entry allowed) with an appropriate background color.	
11	Write a java application to select a city from the combobox and the sex, so that the display is as "You are Male/Female residing in Delhi/Mumbai/Chennai/Kolkata". The textfield for display should be uneditable.	
12	Write a java application to enter the first and last name in different textfields with an appropriate sex, so that the display is in a dialog box as "Your full name is Mr./Ms. R. Saxena". The clear button should clear everything. (use substring(), concat() functions).	
13	Write a java application to calculate the simple interest/Compound interest as selected where principal, rate and time should be entered by the user. Use round() to shorten the calculated interest to 2 significant digits after decimal point.	

14	Write a java application to calculate the Amount by the formula (price * quantity * 0.80) if discount is 20%. Price of the items will be fixed as rice – 80, wheat – 20, sugar – 32.5).	
15	Write a java application to calculate the total amount when item(s) are selected from the list box.	
16	Write a java application to search the item input by the user in a combo box/ list box depending on the button clicked.	
17	Write a java application to display the picture corresponding to the selection in the list box (only one selection is allowed).	

18	<p>Write a java application to play a lotto where 2 number in the range 1 – (the number of items in the combobox) will be generated randomly and the item names with index equal to the these numbers will be displayed in the textboxes name1 and name2, if the names are equal then “you have won 1st prize”, if the first letters of the names are equal then “you have won 2nd prize”, if the no. of characters in both the names are equal the “you have won 3rd prize”, otherwise “you loose” will be displayed.</p>	
19	<p>Write a java application to display the picture according to the choice and generate the bill amount where prices for all items in the combo box will be fixed the you in the code, then a 20% discount if you are a student, if paid by cash an additional discount of 10% while an extra 1.28% if paid by credit card. The final amount is displayed as well as the item selected will also be displayed in the label just below the picture.</p> <p>Monitor – Rs 5500 Keyboard – Rs 250 Mouse – Rs 220 Pen drive – Rs 550 Speaker – Rs 1100 Printer – Rs 5400</p>	
20	<p>Write a java application to enter the user id and password, if the password matches then another window appears with options of insert, replace and append (the 3rd in the right hand side) and if the match fails then the 2nd window(a dialog box) in right hand side appears.</p> <ul style="list-style-type: none"> • Append means to add line after line in the text area • Insert means the text to be inserted at the position specified. • Replace means the text to replace the text appearing between the start and end position in the text area. 	

	
--	--

SQL

Consider the tables given below and answer the questions that follow:

Table: Employee

No	Name	Salary	Zone	Age	Grade	Dept
1	Mukul	30000	West	28	A	10
2	Kritika	35000	Centre	30	A	10
3	Naveen	32000	West	40		20
4	Uday	38000	North	38	C	30
5	Nupur	32000	East	26		20
6	Moksh	37000	South	28	B	10
7	Shelly	36000	North	26	A	30

Table: Department

Dept	DName	MinSal	MaxSal	HOD
10	Sales	25000	32000	1
20	Finance	30000	50000	5
30	Admin	25000	40000	7

Write SQL commands to:

CREATE DATABASE, USE, DROP DATABASE, DESC, SHOW TABLES, SHOW DATABASES, CREATE TABLE, INSERT INTO

1. Create a database mira
2. Get inside the database mira
3. Create tables Employee and Department
4. Insert tuples as shown above
5. Display the databases that are already created.
6. Display the database mira.
7. Display the tables that exists in the current database.
8. Display the structure of the table Employee
9. Display the structure of the table Department

Simple Select

10. Display the details of all the employees.
11. Display the Salary, Zone, and Grade of all the employees.
12. Display the records of all the employees along with their annual salaries. The Salary column of the table contains monthly salaries of the employees.
13. Display the records of all the employees along with their annual salaries. The Salary column of the table contains monthly salaries of the employees. The new column should be given the name "Annual Salary".

Conditional Select using Where Clause

14. Display the details of all the employees who are below 30 years of age.
15. Display the names of all the employees working in North zone.
16. Display the salaries of all the employees of department 10.

Using NULL

17. Display the details of all the employees whose Grade is NULL.
18. Display the details of all the employees whose Grade is not NULL.

Using DISTINCT Clause

19. Display the names of various zones from the table Employee. A zone name should appear only once.
20. Display the various department numbers from the table Employee. A department number should be displayed only once.

Using Logical Operators (NOT, AND, OR)

21. Display the details of all the employees of department 10 who are above 30 years of age.
22. Display the details of all the employees who are getting a salary of more than 35000 in the department 30.
23. Display the names and salaries of all the employees who are working neither in West zone nor in Centre zone.
24. Display the names of all the employees who are working in department 20 or 30.
25. Display the details of all the employees whose salary is between 32000 and 38000.
26. Display the details of all the employees whose grade is between 'A' and 'C'.

Using IN Operator

27. Display the names of all the employees who are working in department 20 or 30. (Using IN operator)
28. Display the names and salaries of all the employees who are working neither in West zone nor in Centre zone. (Using IN operator)

Using BETWEEN Operator

29. Display the details of all the employees whose salary is between 32000 and 38000. (Using BETWEEN operator)
30. Display the details of all the employees whose grade is between 'A' and 'C'. (Using BETWEEN operator)

Using LIKE Operator

31. Display the name, salary, and age of all the employees whose names start with 'M'.
32. Display the name, salary, and age of all the employees whose names end with 'a'.
33. Display the name, salary, and age of all the employees whose names contain 'a'
34. Display the name, salary, and age of all the employees whose names do not contain 'a'
35. Display the details of all the employees whose names contain 'a' as the second character.

Using ORDER BY clause

36. Display the details of all the employees in the ascending order of their salaries.
37. Display the details of all the employees in the descending order of their names.
38. Display the details of all the employees in the ascending order of their grades and within grades in the descending order of their salaries.

Using GROUP BY clause

39. Display the total number of employees in each department.
40. Display the highest salary, lowest salary, and average salary of each zone.
41. Display the average age of employees in each department only for those departments in which average age is more than 30.

Using UPDATE, DELETE, ALTER TABLE

42. Put the grade B for all those whose grade is NULL.
43. Increase the salary of all the employees above 30 years of age by 10%.
44. Delete the records of all the employees whose grade is C and salary is below 30000.
45. Delete the records of all the employees of department 10 who are above 40 years of age.

DROP TABLE, ALTER TABLE

46. Drop the tables Employee and Department.
47. Add another column HireDate of type Date in the Employee table.
48. Modify the column age to favsub with char(15)
49. Remove the column HireDate

बीषम अवकाश कालीन गृहकार्य – Hindi - XII

1. तुलसीदास, जयशंकर प्रसाद, सूर्यकांत त्रिपाठी निराला, रामचन्द्र शुक्ल, का जीवन परिचय तथा साहित्यिक परिचय याद कीजिए।
2. साहित्यिक समाज का दर्पण है विषय पर 400 शब्दों में निबंध लिखिए।
3. विशेष लेखन क्या है? निम्नलिखित में से किसी चार विषय पर विशेष लेखन लिखिए सामाजिक मुद्दा खेल, पर्यावरण, शिक्षा, कानून, स्वास्थ्य।

PSYCHOLOGY - CLASS XII

1. Complete and write psychological tests in your practical file:
 - a) Introduction to psychological testing
 - b) Sodhi's attitude scale
2. Collect the case studies carrying relevant symptoms of the below mentioned disorders: (At least two case studies for one disorder)
 - a) Obsessive compulsive disorder
 - b) Schizophrenia
 - c) Dissociative identity disorder
 - d) Conversion disorder
 - e) Bipolar mood disorder
 - f) Autism
 - g) ADHD (attention deficit hyperactivity disorder)
 - h) Eating disorder
 - i) Generalized anxiety disorder
3. Collect data for a "Case Profile"- an indepth study of any individual around your vicinity or neighborhood including his/her demographic details, family history, professional history, peer group, hobbies and interests or any other relevant information or data.
4. Complete the following assignment of chapter 1 and chapter 3.

CHAPTER 1 (VARIATIONS IN PSYCHOLOGICAL ATTRIBUTES)

1. Differentiate between psychometric and information processing approach to intelligence.
2. Explain Gardner's theory of multiple intelligencies.
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 intelligencies: componential, contextual and experientialExplanation of each of the three types of intelligencies *fig 1.1
6. What is cognitive assessment system?
 - * by Das and NaglieriVerbal and non-verbal tasks.....
Between 5 and 18 years
Used to remedy cognitive deficits
7. Explain the influence of nature and nurture on intelligence.
 - * Nature (heredity): studies on identical twins reared together, studies of identical twins separated in early childhood, fraternal twins reared together, brothers and sisters reared together, siblings reared apart, studies of adopted children
 - * Nurture (environment): intelligence level moves closer to the adoptive parents, studies on children from disadvantaged homes adopted into families with higher socio-economic status, studies on environmental deprivation
 - * intelligence is a product of complex interaction of.....
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 favours one culture over other:
culture-fair or culture-biased
9. The IQ of a 6 year old boy with MA 8 is.....
$$IQ = \frac{MA}{CA} \times 100$$
10. The MA of an 8 year old boy with IQ=80 IS.....
$$MA = \frac{IQ}{CA} \times 100$$
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?

*characteristics 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 3 (MEETING LIFE CHALLENGES)

1. Define stress.

2. Differentiate between eustress and distress.

3. Describe Lazarus' theory of appraisal. Differentiate between primary and secondary appraisal. On what factors does appraisal depend?

4. Describe the various types of stress.

5. Describe four sources of psychological stress.

6. Describe any three sources of stress.

7. Describe the effects of stress on psychological functioning and health.

8. Define burnout.

9. Give Hans Selye's definition of stress. Critically evaluate GAS model of stress.

10. Define coping. Describe the coping strategies given by Endler and Parker.

11. Explain any four stress management techniques.

12. Explain any four life skills to alleviate stress.

13. Describe the aims of positive psychology.

14. Describe any three human virtues.

15. Explain "hedonistic pursuit is not enough and one must try to have meaning in life."

16. Differentiate between adaptation and adjustment.

17. You have lost your family in a disastrous earthquake. With regard to Lazarus' theory, how would you appraise this situation?

*pg 52; primary and secondary appraisal

18 .Manikaran lost his house in the Mumbai floods. Describe his psychological and physiological state.

*psychological state (include emotional, cognitive and behavioural effects of stress) Physiological state-pg.57

19. Rohan has lost his job in Jan, 2010. In March, 2010, his wife died of dengue. In May, 2010, he was diagnosed with ulcer. Describe his physiological condition in reference to GAS.

POLITICAL SCIENCE

- 1) Answer the questions given in question bank on ruled file sheet (question bank given in class)
 - 2) Prepare a map file which should cover all the maps given till chapter 4 from both the books.(Contemporary World Politics and Politics in India Since Independence)
 - 3) Study maps and cartoons mentioned in NCERT
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Wellness Programme for Summer Break 2014

To ensure healthy lifestyle, students are advised to follow wellness Programme during the summer break. Healthy habits make healthy human beings.

Week-1

- 1) **Walking**: Concentrate on breathing, try to co-ordinate hands and leg movements along with rhythmic breath. Elbows should be swinging at 90⁰ forward / backward.
(10 minutes)
- 2) **Free hand exercises**: (25 minutes)
 - (a) Arms rotation forward/backward (16 times each)
 - (b) Stretching – standing, side wise arms bending, open legs knee stretching (16 times each)
 - (c) Bending- forward and backward bends, keeping your knees straight, feel the stretch
(16 times each)
 - (d) Jumping – spot jump, broad jump, alternate single leg jump (20 times each)
- 3) **Cooling Down**: Seating / lying on a clean and airy space, breathe deeply and slowly. Concentrate on breathing and relax.

Week-2

- 1) Walking (10 minutes)
- 2) Jogging (10 minutes)
- 3) Free hand exercises (10 minutes)
- 4) Practice simple yogasanas (30 minutes)

Week-3

- 1) Jogging (10 minutes)
- 2) Skipping (10 minutes)
- 3) Free hand exercises (15 minutes)
- 4) Stretching exercise (15 minutes)

- 5) Cooling down meditation (10 minutes)

Week-4

(1 Hour)

- 1) Walking / Cycling (10 minutes)
- 2) Jogging (10 minutes)
- 3) Practice simple yogasanas twice (30 minutes)
- 4) Meditation (10 minutes)

Week-5

- 1) Cycling / Jogging (10 minutes)
- 2) Running (10 minutes)
- 3) Free hand exercises (20 minutes)
- 4) Push-up / Sit-ups (16 times each) (10 minutes)
- 5) Cooling down – Meditation (10 minutes)

Week-6

- 1) Jogging (05 minutes)
- 2) Running (10 minutes)
- 3) Stretching exercises (15 minutes)
- 4) Push-ups & Sit-ups (20 times each) (10 minutes)
- 5) Yogasana & Meditation (30 minutes)

Notes

- Do your exercise in clean and open space. Do regular exercise with proper rest between each.
- Never over-do any exercise.
- Warming up before and cooling down after is mandatory.
- Increase or decrease timing / repetitions of exercise / intensity of exercise according to individual capability
- Take proper diet, wholesome nutritious and fiber rich foods. Increase fluid intake, fresh and seasonal fruits and vegetables. Avoid junk food.
- Consult doctor's / medical expert's immediately if any medical problem feel / arise during or after practice.