## केन्द्रीय विद्यालय कमान अस्पताल अलीपुर, कोलकाता ग्रीष्मावकाश गृहकार्य class-12(विषय- हिन्दी )

## रचनात्मक लेखन

1.दिए गए निम्नलिखित बिन्दुओं पर अनुच्छेद लेखन
2.समाचार - पत्र का महत्त्व
3.गंगा नदी
4.भारत की सांस्कृतिक विशेषताएँ
5.जीवन में हास्य - विनोद का स्थान

पत्र - लेखन
6. प्लास्टिक की थैली पर प्रतिबंध के बावज़ूद इनके बढ़ते प्रयोग पर अधिकारियों का ध्यान आकर्षित करते हुए अपने क्षेत्र के प्रमुख समाचार - पत्र के संपादक के नाम लगभग 150 शब्दों का एक पत्र लिखें।
7.सार्वजनिक स्थानों पर धूम्रपान निषेध नियम के उल्लंघन पर चिंता जताते हुए राज्य के पर्यावरण विभाग के सचिव को एक पत्र लिखें।
8.बैंक के प्रधान प्रबंधक को अपने ग्राम में एक शाखा खोलने का अनुरोध करते हुए पत्र लिखिए।

पूरक पुस्तक
9.अतीत में दबे पाँव कहानी को पढ़कर उसका सारांश लिखिए।

## QUESTIONS:-

- Solve last 5 years CBSE Question Paper.

CH: $\underline{2}$ ACCOUNTING FOR PARTNERSHIP FIRM-FUNDAMENTALS QUESTIONS:-

- Solve last 5 years CBSE Question Paper.
- CBSE Project work.

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Kendriya Vidyalaya Command Hospital
Class: XII Subject: Business Studies Submission Date: 21/05/2021
CH: 1 NATURE AND SIGNIFICANCE OF MANAGEMENT QUESTIONS:-

- Solve MCQ, Short and Long Questions from NCERT.
- Solve last 5 years CBSE Question Paper.


## CH: $\underline{2}$ PRINCIPLES OF MANAGEMENT

## QUESTIONS:-

- Solve MCQ, Short and Long Questions from NCERT.
- Solve last 5 years CBSE Question Paper.
- CBSE Project work.


## HOLIDAY HOME WORK

## Subject Biology

Class XII

1. What are the different ways of vegetative propagation?
2. What are microsporogenesis and megasporogenesis?
3. Draw and describe Spermatogenesis and Oogenesis.
4. Draw a human sperm.
5. Write a short note on Menstrual cycle.
6. Perform investigatory project and write a report.

## HOLIDAY HOME WORK CLASS:XIISC CHEMISTRY

- Solve numerical problems of NCERT book from chapter 1-3
- Solve repeated CBSE questions from chapter 1-3
- Practice IUPAC nomenclature of organic compound and revise all the basic concepts of organic chemistry learnt in class XI
- Reading the chapter Chemistry in Everyday life
- Revise concepts related to p-block elements as learnt in class XI


## Repeated questions in CBSE

Chapter -1-THE SOLID STATE

## CATEGORY-I QUESTIONS REPEATED AT LEAST 3 OR MORE TIMES

1 MARK QUESTIONS:

1. Name a liquefied metal which expands on solidification.
2. How many number of molecules per unit cell which crystallizes in the form of face centred (monoclinic) lattice with a molecule at each lattice.
3. What is the coordination number of carbon, in diamond ?
4. Name the solid which has weakest intermolecular force ?
5. Arrange the following types of interactions in correct order of their increasing strength :

Covalent, hydrogen bonding, Vander Waals, dipole dipole.
6. Give reason for the appearance of colour in alkali metal halides.
7. Which type of defect occur in Ag Br ?
8. Give one example of doping which produces p-type of semi-conductors.
9. Out of (a) Graphite and (b) Carborundum which one is harder?
10.How can a material be made amorphous?

## 2/3 MARK QUESTIONS:

1. Give Reason : The energy required to vaporize one mol of copper is smaller than that of energy required to vaporize 1 mol of diamond.
2. Silver crrystallises with the face- centred cubic unit cell.Each side of this unit cellhas a length of 409 pm . What is the radius of silver atom ? Assumethat the atoms just touch each otheron the diagonal across face of the unit cell.
3. Give reasons :
(a) Diamond and rhombic Sulphur are covalent solids, but the latter has lower melting points.
(b) Among NaCl and $\mathrm{CsCl}, \mathrm{CsCl}$ is quite stable.
4.The density of lead is $11.3 \mathrm{~g} / \mathrm{cm} 3$ and the metal crystallises with fcc unit cell.Estimate the radius of lead atom .
4. In the mineral spinel; having the formula $\mathrm{MgAl}_{2} \mathrm{O}_{4}$. The oxide ions are arranged in $\mathrm{CCP}, \mathrm{Mg}^{2+}$ ions occupy the tetrahedral voids. While $\mathrm{Al}^{3+}$ ions occupy the octahedral voids. (i) What percentage of tetrahedral voids is occupied by $\mathrm{Mg}^{2+}$ ions? (ii) What percentage of octahedral voids is occupied by $\mathrm{Al}^{3+}$ ions?
5. Give reasons :
(a) Window glass of old building look milky.
b) Window glass of old building is thick at bottom.
(c) $\mathrm{CaCl}_{2}$ will introduce Schottky defect if added to AgCl crystal.
6. Analysis shows that nickel oxide has the formula $\mathrm{Ni}_{0.98} \mathrm{O}_{1.00}$. What fractions of nickel exist as $\mathrm{Ni}^{2+}$ and $\mathrm{Ni}^{3+}$ ions ?
7. What type of defect can arise when a solid is heated ? Which physical property is affected by this and in what way?
8. (a) What happens when a Ferromagnetic or Ferrimagnetic solid is heated?
(b) The ions of MgO and NaF all have the same number of electrons and intermolecular distance are about the same ( $235 \& 215 \mathrm{pm}$ ). Why are the melting points are so different $\left(2642{ }^{\circ} \mathrm{C} \& 992^{\circ} \mathrm{C}\right)$ ?
9. (a) If the radius of the $\mathrm{Br}^{-}$ion is 0.182 nm , how large a cation can fit in each of the tetrahedral hole.
(b) AgI crystallizes in a cubic closed packed ZnS structure. What fraction of tetrahedral site is occupied by Ag ion ?
(c) At what temp. range, most of the metals becomes super conductors?

## CATEGORY -II QUESTIONS REPEATED ONCE OR TWICE

1. What is the coordination number of each type of ions in a rock-salt type crystal structure?
2. What is a semiconductor? Describe the two main types of semiconductors and explain mechanisms for their conduction .
3. How would you account for the following?
4. Define the 'forbidden zone' of an insulator.
5. Niobium (Nb) crystallises in a body-centred cubic (bcc) structure. If its density is $8.55 \mathrm{~g} \mathrm{~cm}-3$, calculate the atomic radius of niobium.
(Atomic mass of $\mathrm{Nb}=93 \mathrm{u} ; \mathrm{NA}=6.0210 \mathrm{~mol}^{\prime} 23-1$ )
6 . What is the number of atoms in a body-centred cubic unit cell of a crystal?
6. Which point defect in its crystal unit cells decreases the density of a solid ?

8 .Define the terms ferromagnetism,ferrimagnetism \& paramagnetism .
9. Write a feature which will distinguish a metallic solid from an ionic solid.
10. The well known mineral fluorite is chemically calcium fluoride. It is known that in one unit cell of this mineral there are $4 \mathrm{Ca}^{2+}$ ions and $8 \mathrm{~F}^{-}$ions and that $\mathrm{Ca}^{2+}$ ions are arranged in a fcc lattice. The $\mathrm{F}^{-}$ions fill all the tetrahedral holes in the face centred cubic lattice of $\mathrm{Ca}^{2+}$ ions. The edge of the unit
cell is $5.46 \times 10^{-8} \mathrm{~cm}$ in length. The density of the solid is $3.18 \mathrm{~g} \mathrm{~cm}-3$. Use this information to calculate Avogadro's number (Molar mass of $\mathrm{CaF}_{2}=78.08 \mathrm{~g} \mathrm{~mol}$ )

## Chapter-2 SOLUTION

## CATEGORY-I QUESTIONS REPEATED AT LEAST 3 OR MORE TIMES 1 MARK QUESTIONS

1. What is 'reverse osmosis'?

2 Define an ideal solution and write one of its characteristics.
3. Some liquids on mixing form 'azeotropes'. What are 'azeotropes'?
4. What is meant by osmotic pressure?
5. Define mole fraction.
6. Explain Henry's Law with an example .
7. Define ideal solution .
8. Define Raoult's Law.

## 2/3 MARKS QUESTIONS

1. State Henry's law correlating the pressure of a gas and its solubility in a solvent and mention two applications of the law.
2. State Raoult's law for solutions of volatile liquids. Taking suitable examples explain the meaning of positive and negative deviations from Raoult's law.
3.Define the term osmotic pressure. Describe how the molecular mass of a substance can be determined by a method based on measurement of osmotic pressure?
4.Define osmotic pressure. How is it that measurement of osmotic pressures is more widely used for determining molar masses of macromolecules than the rise in boiling point or fall in freezing point of their solutions?
3. Calculate the amount of KCl which must be added to 1 kg of water so that its freezing point is depressed by 2 K .
4. Differentiate between molality and molarity of a solution. What is the effect of rise in temperature on molality and molarity of the solution?
7.Non-ideal solutions exhibit either positive or negative deviations from Raoult's law.

What are these deviations and why are they caused? Explain with one example for each type.
8.A solution of glycerol $(\mathrm{C} 3 \mathrm{H} 8 \mathrm{O} 3$; molar mass $=92 \mathrm{~g} \mathrm{~mol} \square 1)$ in water was prepared by dissolving
someglycerol in 500 g of water. This solution has a boiling point of $100.42^{\circ} \mathrm{C}$. What mass of glycerol was dissolved to make this solution? $K b$ for water $=0.512 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}{ }^{\square 1}$.
9. Define the following terms:
(i) Mole fraction
(ii) Isotonic solutions
(iii) Van't Hoff factor
(iv) Ideal solution
10. 15.0 g of an unknown molecular material was dissolved in 450 g of water. The resulting solution was found to freeze at $-0.34^{\circ} \mathrm{C}$. What is the molar mass of this material $?(\mathrm{Kf}$ for water $=$ $1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}-1$ ).
11.Calculate the freezing point depression expected for 0.0711 m aqueous solution of sodium sulphate. If the solution actually freezes at $-0.320^{\circ} \mathrm{C}$, what is the actual value of van't Hoff factor at this temperature ? $(K f$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{mol-1})$
12. Define the term osmotic pressure. Describe how the molecular mass of a substance can be determined by osmotic pressure method.

## 5 MARK QUESTIONS

1. What is meant by:
(i) Colligative properties
(ii) Molality of a solution.
(b) What concentration of nitrogen should be present in a glass of water at room temperature?

Assume a temperature of $25^{\circ} \mathrm{C}$, total pressure of 1 atmosphere and mole fraction of nitrogen in air of 0.78 . [ KH for nitrogen $\left.=8.42 \times 10^{-7} \mathrm{M} / \mathrm{mm} \mathrm{Hg}\right]$.
2.(a) State the following:
(i) Henry's law about partial pressure of a gas in a mixture.
(ii) Raoult's law in its general form in reference to solutions.
(b) A solution prepared by dissolving 8.95 mg of a gene fragment in 35.0 mL of water has an osmotic pressure of 0.335 torr at $25^{\circ} \mathrm{C}$. Assuming the gene fragment is a non-electrolyte, determine its molar mass.
3.(a) Differentiate between molarity and molality in a solution. What is the effect of temperature change on molarity and molality in a solution?
(b) What would be the molar mass of a compound if 6.21 g of it dissolved in 24.0 g of chloroform form a solution that has a boiling point of $68.04^{\circ} \mathrm{C}$. The boiling point of pure chloroform is $61.7^{\circ} \mathrm{C}$ and the boiling point elevation constant, Kb for chloroform is $3.63^{\circ} \mathrm{C} / \mathrm{m}$.

4(a) Define the following terms:
(i) Mole fraction (ii) Ideal solution
(b) 15.0 g of an unknown molecular material is dissolved in 450 g of water. The resulting solution freezes at $-0.34^{\circ} \mathrm{C}$. What is the molar mass of the material? $(K f$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}-1)$
5.(a) Explain the following:
(i) Henry's law about dissolution of a gas in a liquid.
ii) Boiling point elevation constant for a solvent.
(b) A solution of glycerol ( C 3 H 8 O 3 ) in water was prepared by dissolving some glycerol in 500 g of water. This solution has a boiling point of $100.42^{\circ} \mathrm{C}$. What mass of glycerol was dissolved to
make this solution? $(K b$ for water $=0.512 \mathrm{~K} \mathrm{~kg} \mathrm{mol-1}$
6(a) State Raoult's law for a solution containing volatile components.
How does Raoult's law become a special case of Henry's law?
(b) 1.00 g of a non-electrolyte solute dissolved in 50 g of benzene lowered the freezing point of benzene by 0.40 K . Find the molar mass of the solute. $(K f$ for benzene $=5.12 \mathrm{~kg} \mathrm{~mol}-1)$
(Molar mass of glucose $=180 \mathrm{~g} \mathrm{~mol}-1)$
7 (a) Define the following terms:
(i) Molarity
(ii) Molal elevation constant ( $K b$ )
(b) A solution containing 15 g urea (molar mass $=60 \mathrm{~g} \mathrm{~mol}-1$ ) per litre of solution in water has the same osmotic pressure (isotonic) as a solution of glucose (molar mass $=180 \mathrm{~g} \mathrm{~mol}-1$ ) in water. Calculate the mass of glucose present in one litre of its solution.
8.(a) What type of deviation is shown by a mixture of ethanol and acetone? Give reason.
(b) A solution of glucose (molar mass $=108 \mathrm{~g}$ mol-1) in water is labelled as $10 \%$ (by mass). What would be the molality and molarity of the solution? (Density of solution $=1.2 \mathrm{~g} \mathrm{~mL}-1$ ) 9.(a) Define the following terms:
(i) Azeotrope
(ii) Osmotic pressure
(iii) Colligative properties
(b) Calculate the molarity of $9.8 \%(\mathrm{w} / \mathrm{w})$ solution of $\mathrm{H}_{2} \mathrm{SO}_{4}$ if the density of the solution is 1.02 g $\mathrm{mL}-1$. (Molar mass of $\mathrm{H}_{2} \mathrm{SO}_{4}=98 \mathrm{~g} \mathrm{~mol}-1$ )

## .CATEGORY -II QUESTIONS REPEATED ONCE OR TWICE

1.Calculate the temperature at which a solution containing 54 g of glucose, $\left(\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}\right)$, in 250 g of water will freeze. ( $K f$ for water $=1.86 \mathrm{~K} \mathrm{~mol}-1 \mathrm{~kg}$ )
2.100 mg of a protein is dissolved in just enough water to make 10.0 mL of solution. If this solution has an osmotic pressure of 13.3 mm Hg at 250 C , what is the molar mass of the protein? ( $R=0.0821 \mathrm{~L}$ atm mol-1 $\mathrm{K}-1$ and $760 \mathrm{~mm} \mathrm{Hg}=1 \mathrm{~atm}$.
3.Calculate the freezing point depression expected for 0.0711 m aqueous solution of $\mathrm{Na}_{2} \mathrm{SO}_{4}$. If this solution actually Freezes at $\square 0.320^{\circ} \mathrm{C}$, what would be the value of van't Hoff factor?
$\left(\mathrm{K} f\right.$ for water is $1.86^{\circ} \mathrm{C} \mathrm{mol}{ }^{\square 1}$ ).
4. A solution prepared by dissolving 1.25 g of oil of winter green (methyl salicylate) in 99.0 g
of benzene has a boiling point of $80.31^{\circ} \mathrm{C}$. Determine the molar mass of this compound.
(B.P. of pure Benzene $=80.10^{\circ} \mathrm{C}$ and Kb for benzene $=2.53^{\circ} \mathrm{C} \mathrm{kg} \mathrm{mol-1)}$
5. What mass of ethylene glycol (molar mass $=62.0 \mathrm{~g}$ mol-1) must be added to 5.50 kg of water to

$$
\text { lower the freezing point of water from } 0^{\circ} \mathrm{C} \text { to }-10.0^{\circ} \mathrm{C} ?\left(\mathrm{~K} f \text { for water }=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}\right) .
$$

6 A 1.00 molal aqueous solution of trichloroacetic acid $(\mathrm{CCl3COOH})$ is heated to its boiling point. The solution has the boiling point of $100.18^{\circ} \mathrm{C}$. Determine the van't Hoff factor for trichloroacetic acid. $\quad(\mathrm{Kb}$ for water $=0.512 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}-1)$
7. What mass of NaCl (molar mass $=58.5 \mathrm{~g}$ mol-1) must be dissolved in 65 g of water to lower the freezing point by $7.5^{\circ} \mathrm{C}$ ? The freezing point depression constant, $\mathrm{K} f$, for water is $1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$. Assume van't Hoff factor for NaCl is 1.87 .
8. 18 g of glucose, C6H12O6 (Molar Mass $=180 \mathrm{~g}$ mol-1) is dissolved in 1 kg of water in a sauce pan. At what temperature will this solution boil?
9. Determine the osmotic pressure of a solution prepared by dissolving $2.5 \times 10-2 \mathrm{~g}$ of K2SO4 in 2

L of water at 25 oC , assuming that it is completely dissociated.

$$
(R=0.082 \mathrm{~L} \text { atm K }-1 \mathrm{~mol}-1, \text { Molar mass of } \mathrm{K} 2 \mathrm{SO} 4=174 \mathrm{~g} \mathrm{~mol}-1) .
$$

10. Henry's law constant $(\square \mathrm{H})$ for the solution of methane in benzene at 298 K is $4.27 \times 105 \mathrm{~mm} \mathrm{Hg}$. Calculate the solubility of methane in benzene at 298 K under 760 mm Hg .
11. Calculate the mass of compound (molar mass $=256 \mathrm{~g} \mathrm{~mol}^{-1}$ ) to be dissolved in 75 g of benzene to lower its freezing point by $0.48 \mathrm{~K}\left(\mathrm{~K} f=5.12 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}\right)$.
1215.0 g of an unknown molecular material was dissolved in 450 g of water. The resulting solution was found to freeze at $-0.34^{\circ} \mathrm{C}$. What is the molar mass of this material ? $(\mathrm{Kf}$ for water $=1.86 \mathrm{~K} \mathrm{~kg}$ mol-1).
13.(a) Define the following terms:
(i) Ideal solution
(ii) Azeotrope
(iii) Osmotic pressure
(b) A solution of glucose ( C 6 H 12 O 6 ) in water is labelled as $10 \%$ by weight. What would be the molality of the solution?
12. Define the following terms: i) Mole fraction,ii) Isotonic solution, iii) van't Hoff factor iv) Ideal solution v)Raoult's Law.
13. Find the freezing point of a solution containing 0.520 g glucose $\left(\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}\right)$ dissolved in 80.2 g of water. Given $\mathrm{K}_{\mathrm{f}}$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$.
14. Calculate the temperature at which a solution containing 54 g glucose $\left(\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}\right)$ in 250 g of water will freeze. Given $\mathrm{K}_{\mathrm{f}}$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$ \& molar of glucose is $180 \mathrm{~g} \mathrm{~mol}^{-1}$.
15. Calculate the freezing point depression expected for 0.0711 m aq. solution of $\mathrm{Na}_{2} \mathrm{SO}_{4}$. If this solution actually freezes at 0.320 degree Celsius, what would be the value of van't Hoff factor? $\mathrm{K}_{\mathrm{f}}$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$
16. 100 mg of a protein is dissolved in just enough water to make 10 mL of solution. If this solution has osmotic pressure of 13.3 mm Hg at 25 degree Celsius, what is the molar mass of solute? $(\mathrm{R}=$ $\left.0.0821 \mathrm{~L} \mathrm{~atm} \mathrm{~mol}^{-1} \mathrm{~K}^{-1}, \quad 1 \mathrm{~atm}=760 \mathrm{~mm} \mathrm{Hg}\right)$
17. A solution of urea in water has a boiling point of 373.128 K . Calculate the freezing point of the same solution. Given $\mathrm{K}_{\mathrm{f}}$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1} \& \mathrm{~K}_{\mathrm{b}}=0.52 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$.
18. Calculate the amount of sodium chloride which must be added to one kilogram of water so that the freezing point of water is depressed by $3 \mathrm{~K} .\left(\mathrm{K}_{\mathrm{f}}\right.$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}, \mathrm{Na}=23 \& \mathrm{Cl}=$ 35.5)
19. An antifreeze solution is prepared from 222.6 g of ethylene glycol $\mathrm{C}_{2} \mathrm{H}_{4}(\mathrm{OH})_{2}$ and 200 g of water. Calculate the molality of the solution. If the density of the solution be $1.072 \mathrm{~g} \mathrm{~mL}^{-1}$, what will be the molariry of the solution?
20. A solution prepared by dissolving 8.95 g of a gene fragment in 35.0 mL of water has an osmotic pressure of 0.335 torr at 25 degree Celsius. Assuming gene fragment is non electrolyte determine its molar mass.
21. 15.0 g of an unknown molecular mass material is dissolved in 450 g of water. The resulting solution freezes at -0.34 degree Celsius. What is the molecular mass of the material? Given $\mathrm{K}_{\mathrm{f}}$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$.
22. a) Non-ideal solutions exhibit either positive or negative deviations from Raoult's Law. What are these deviations and how are they caused?
b) What mass of $\mathrm{NaCl}\left(\right.$ molar mass $\left.58.5 \mathrm{gmol}^{-1}\right)$ must be dissolved in 65 g of water to lower the freezing point by 7.5 degree Celsius? $\mathrm{K}_{\mathrm{f}}$ for water $=1.86 \mathrm{~K} \mathrm{~kg} \mathrm{~mol}^{-1}$. Assume van't Hoff factor for NaCl is 1.87 .
23. a) The molecular mass of polymers is determined by osmotic pressure method and not by any other colligative property method. Give two reasons
b) At $300 \mathrm{~K}, 36 \mathrm{~g}$ of glucose $\left(\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}\right)$ present per litre in its solution has an osmotic pressure of 4.98 bar. If the osmotic pressure of another glucose solution is 1.52 bar at the same temperature, calculate the concentration of the other solution.

## CHAPTER -3 ELECTROCHEMISTRY

## CATEGORY-I QUESTIONS REPEATED AT LEAST 3 OR MORE TIMES 1 MARK QUESTIONS

1. Define the term molar conductivity. How is it related to conductivity of the related solution?
2. How do metallic and ionic substances differ in conducting electricity?
3.. What is meant by 'limiting molar conductivity'?
3. Write two advantages of $\mathrm{H}_{2}-\mathrm{O}_{2}$ fuel cell over ordinary cell.

## 2/3 MARKS QUESTIONS

1. Define conductivity and molar conductivity for the solution of an electrolyte. How do they vary when the concentration of electrolyte in the solution increases?
2. What type of cell is a lead storage battery? Write the anode and the cathode reactions and the overall cell reaction occurring in the use of a lead storage battery.'
3. Define the term molar conductivity and indicate how molar conductivity of a substance changes with change in concentration of a weak electrolyte and a strong electrolyte in its solution.
4. Conductivity of 0.00241 M acetic acid solution is $7.896^{\prime} 10-5 \mathrm{~S} \mathrm{~cm}^{-1}$. Calculate its molar conductivity in this solution. If $\mathrm{L} m^{\circ}$ for acetic acid is $390.5 \mathrm{~S} \mathrm{~cm}^{2} \mathrm{~mol}^{-1}$, what would be its dissociation constant?
5. The resistance of a conductivity cell containing 0.001 M KCl solution at 298 K is 1500 W .

What is the cell constant if the conductivity of 0.001 M KCl solution at 298 K is $0.146^{\prime} 10-3 \mathrm{~S}$
$\mathrm{cm}-1$ 6. The conductivity of 0.20 M solution of KCl at 298 K is $0.025 \mathrm{~S} \mathrm{~cm}-1$. Calculate its molar Conductivity.
7. State Kohlrausch law of independent migration of ions. Why does the conductivity of a solution decrease with dilution?
8. (a) Calculate $\Delta G o$ for the reaction

$$
\mathrm{Mg}(s)+\mathrm{Cu} 2+(a q) \rightarrow \mathrm{Mg} 2+(a q)+\mathrm{Cu}(s)
$$

Given: $E^{0}$ cell $=2.71 \mathrm{~V}, 1 \mathrm{~F}=96500 \mathrm{C}$ mol-1
(b) Name the type of cell which was used in Apollo space programme for providing electrical power.
9.A solution of $\mathrm{Ni}(\mathrm{NO} 3) 2$ is electrolysed between platinum electrodes using a current of 5.0 ampere

For 20 minutes. What mass of nickel will be deposited at the cathode?
(Given: At. Mass of $\mathrm{Ni}=58.7 \mathrm{~g}$ mol-1, $1 \mathrm{~F}=96500 \mathrm{C}$ mol-1)
10. Express the relation between conductivity and molar conductivity of a solution held in a cell.
11. The molar conductivity of a 1.5 M solution of an electrolyte is found to be $138.9 \mathrm{~S} \mathrm{~cm}^{2} \mathrm{~mol}^{-1}$.

Calculate the conductivity of the solution.
12. Express the relation among the cell constant, resistance of the solution in the cell and conductivity of the solution. How is molar conductivity related to its conductivity?
13. What type battery is lead storage battery? Write anode and cathode reactions and the overall reaction occurring in a lead storage battery, when current is drawn from it.
14. a) Define molar conductivity of a solution and explain how molar conductivity changes with change in concentration of solution for a week and a strong electrolyte.
b) The resistance of a conductivity cell containing 0.001 M KCl solution at 298 K is 1500 ohm. What is the cell constant, if the conductivity of 0.001 M KCl solution at 298 K is $0.146 \times 10^{-3} \mathrm{~S}$ $\mathrm{cm}^{-1}$ ?
15. A voltaic cell is set up at 298 K with the following half cells:
$\mathrm{Al} \mid \mathrm{Al}^{+3}(0.001 \mathrm{M})$ and $\mathrm{Ni} \mid \mathrm{Ni}^{+2}(0.50 \mathrm{M})$. Write the cell reaction and determine the cell potential. Given:
$\mathrm{E}_{\mathrm{Ni}+2 / \mathrm{Ni}}^{0}=-0.25 \mathrm{~V} \& \mathrm{E}_{\mathrm{Al}+3 / \mathrm{Al}}^{0}=-1.66 \mathrm{~V}$.
16. Calculate the potential for half-cell containing $0.10 \mathrm{M} \mathrm{K}_{2} \mathrm{Cr}_{2} \mathrm{O}_{7}(\mathrm{aq}),. 0.20 \mathrm{M} \mathrm{Cr}^{+3}(\mathrm{aq}). \& 10^{-4} \mathrm{M}$ $\mathrm{H}^{+}$(aq.). The half cell reaction is: $\mathrm{Cr}_{2} \mathrm{O}_{7}^{-2}$ (aq.) $+14 \mathrm{H}^{+}$(aq.) $+6 \mathrm{e}^{-} \rightarrow 2 \mathrm{Cr}^{+3}$ (aq.) $+7 \mathrm{H}_{2} \mathrm{O}(1)$ and standard electrode potential is 1.33 V

## CATEGORY -II QUESTIONS REPEATED ONCE OR TWICE

1. Three conductivity cells A, B and C containing solutions of zinc sulphate, silver nitrate and copper sulphate respectively are connected in series. A steady current of 1.5 amperes is passed through them until 1.45 g of silver is deposited at the cathode of cell B. How long did the urrent flow? What mass of copper and what mass of zinc got deposited in their respective cells?
2. Calculate the emf of the following cell at 298 K :

$$
\mathrm{Fe}(\mathrm{~s})\left|\mathrm{Fe}^{2+}(0.001 \mathrm{M}) \| \mathrm{H}^{+}(1 \mathrm{M})\right| \mathrm{H}_{2}(\mathrm{~g})(1 \text { bar), } \mathrm{Pt}(\mathrm{~s})
$$

(Given Ecello $=+0.44 \mathrm{~V}$ )
3.The standard electrode potential ( $E^{\circ}$ ) for Daniell cell is +1.1 V . Calculate the $\square G^{\circ}$ for the reaction

$$
\begin{aligned}
& \mathrm{Zn}(s)+\mathrm{Cu}^{2+}(a q)->\mathrm{Zn}^{2+}(a q)+\mathrm{Cu}(s) \\
& (1 \mathrm{~F}=96500 \mathrm{C} \text { mol-1). }
\end{aligned}
$$

4. A voltaic cell is set up $25^{\circ} \mathrm{C}$ with the following half-cells:
$\mathrm{Al} \mid \mathrm{Al} 3+(0.0010 \mathrm{M})$ and $\mathrm{Ni} \mid \mathrm{Ni} 2+(0.50 \mathrm{M})$.
Write the equation for the cell reaction that occurs when the cell generates an electric current and determine the cell potential. (Given : $\mathrm{E}(\mathrm{Ni} / \mathrm{Ni})=0.25 \mathrm{~V}, \quad \mathrm{E}(\mathrm{Al} / \mathrm{Al}))=1.66 \mathrm{~V})$ 5. Calculate the equilibrium constant for the reaction equilibrium

$$
\mathrm{Fe}(s)+\mathrm{Cd} 2+(a q) 1 \mathrm{Fe} 2+(a q)+\mathrm{Cd}(s)
$$

Given: $\mathrm{E}^{\mathrm{o}}{ }_{\left(\mathrm{cd} / \mathrm{cd}^{2+}\right)}=0.44, \mathrm{E}_{(\mathrm{fe} / \mathrm{fe} 2+)}=0.44$
6.The molar conductivity of a 1.5 M solution of an electrolyte is found to be $138.9 \mathrm{~S} \mathrm{~cm} 2 \mathrm{~mol}-1$.

Calculate the conductivity of this solution.
7. (a) Define the following terms:
(i) Limiting molar conductivity (ii) Fuel cell
(b) Resistance of a conductivity cell filled with $0.1 \mathrm{~mol} \mathrm{~L}^{-1} \mathrm{KCl}$ solution is 100 ohm . If the resistance of the same cell when filled with $0.02 \mathrm{~mol} \mathrm{~L}^{-1} \mathrm{KCl}$ solution is 520 ohm , calculate the conductivity and molar conductivity of $0.02 \mathrm{~mol} \mathrm{~L}^{-1} \mathrm{KCl}$ solution. The conductivity of $0.1 \mathrm{~mol} \mathrm{~L}^{-}$ ${ }^{1} \mathrm{KCl}$ solution is $1.29 \times 10^{-2} \mathrm{ohm}^{-1} \mathrm{~cm}^{-1}$.
8. (a) State Faraday's first law of electrolysis. How much charge in terms of Faraday is required for the reduction of 1 mol of $\mathrm{Cu}^{2+}$ to Cu ? (b) Calculate emf of the following cell at 298 K :
$\mathrm{Mg}(\mathrm{s}) ; \mathrm{Mg}^{2+}(0.1 \mathrm{M}) / / \mathrm{Cu}^{2+}(0.01) ; \mathrm{Cu}(\mathrm{s})$
[Given $E$ cell ${ }^{\circ}=2.71 \mathrm{~V}, 1 \mathrm{~F}=96500 \mathrm{C} \mathrm{mol}^{-1}$ ]
Q9. (a) How many moles of mercury will be produced by electrolysing $1.0 \mathrm{M} . \mathrm{Hg}(\mathrm{NO} 3) 2$ solution with a current of 2.00 A for 3 hours?
(b) A voltaic cell is set up at $25^{\circ} \mathrm{C}$ with the following half-cells $\mathrm{Al3}+(0.001 \mathrm{M})$ and $\mathrm{Ni} 2+(0.50$ M). Write an equation for the reaction that occurs when the cell generates an electric current and determine the cell potential. (Given: $E \mathrm{Ni} / \mathrm{Ni}^{+}=-0.25 \mathrm{~V}, E A 1 / \mathrm{Al3}^{+}=-1.66 \mathrm{~V}$ ) Q10. Formulate the galvanic cell in which the following reaction takes place:

$$
\mathrm{Zn}(\mathrm{~s})+2 \mathrm{Ag}^{+}(\text {aq. }) \rightarrow \mathrm{Zn}^{+2}(\text { aq. })+2 \mathrm{Ag}(\mathrm{~s})
$$

i) Which electrode is negatively charged? ii) Write the reaction taking place at each electrode.
iii) Which are the carriers of current inside the cell?

Q11. The conductivity of a 0.20 M solution of KCl at 298 K is $0.0248 \mathrm{~S} \mathrm{~cm}^{-1}$. Calculate its molar conductivity.
Q12. Explain why electrolysis of $\mathrm{NaCl}(\mathrm{aq}$.$) gives \mathrm{H}_{2}$ at cathode and $\mathrm{Cl}_{2}$ at anode. Write the overall reaction. Given: $\mathrm{E}_{\mathrm{Na}+\mathrm{Na}}^{0}=-2.71 \mathrm{~V}, \mathrm{E}_{\mathbf{H 2 O / H 2}}^{0}=-0.83 \mathrm{~V}, \mathrm{E}_{\mathrm{Cl} / \mathrm{Cl}-}^{0}=+1.36 \mathrm{~V} \& \mathrm{E}^{0} \mathrm{H}^{+} / \mathrm{H}_{2} \mathrm{O}=+1.23 \mathrm{~V}$

Q13. State and explain Kohlrausch's law of independent migration of ions. Write an expression for the molar conductivity of acetic acid at infinite dilution according to Kohlrausch's law.
Q14. Two half reactions of an electrochemical cell are given below:

$$
\begin{aligned}
& \mathrm{MnO}_{4}^{-} \text {(aq.) }+8 \mathrm{H}^{+} \text {(aq.) }+5 \mathrm{e}^{-} \rightarrow \mathrm{Mn}^{+2} \text { (aq.) }+4 \mathrm{H}_{2} \mathrm{O}(\mathrm{l}) \quad \mathrm{E}^{0}=+1.51 \mathrm{~V} \\
& \mathrm{Sn}^{+2} \text { (aq.) } \rightarrow \mathrm{Sn}^{+4} \text { (aq.) }+2 \mathrm{e}^{-} \mathrm{E}^{0}=-0.15 \mathrm{~V}
\end{aligned}
$$

Construct the redox equation from these and predict whether the reaction is reactant or product favoured.

Q15. The chemistry of corrosion of iron is essentially an electrochemical phenomenon. Explain the reactions occurring during corrosion of iron exposed to atmosphere.
Q16. Calculate the limiting molar conductivity of acetic acid. Given that limiting molar conductivities of $\mathrm{HCl}, \mathrm{NaCl} \& \mathrm{CH}_{3} \mathrm{COONa}$ are $426.6,126.0 \& 91.0 \mathrm{~S} \mathrm{~cm}^{2} \mathrm{~mol}^{-1}$ respectively. Q17. One half-cell in a voltaic cell is constructed from a silver wire dipped in silver nitrate solution of unknown concentration. The other half- cell consists of a zinc electrode in a 0.10 M solution of zinc nitrate. A voltage of 1.48 V is measured for this cell. Use this information to calculate the concentration of silver nitrate solution. Given: $\mathrm{E}_{\mathrm{Zn}+2 / \mathrm{Zn}}^{0}=-0.763 \mathrm{~V}$ \& $\mathrm{E}_{\mathrm{Ag}+/ \mathbf{/ g}}^{0}=+0.80 \mathrm{~V}$. Q18. A copper-silver cell is set up. The copper ion concentration is 0.01 M . The concentration of silver ion is not known. The cell potential was found to be 0.422 V . Determine the concentration of silver ions in the cell. Given: $\mathrm{E}_{\mathbf{C u}+2 / \mathrm{Cu}}=+0.34 \mathrm{~V} \& \mathrm{E}_{\mathbf{A g}+/ \mathbf{g}}^{0}=+0.80 \mathrm{~V}$. Q19. Conductivity of $0.00241 \mathrm{M} \mathrm{CH}_{3} \mathrm{COOH}$ is $7.896 \mathrm{X} 10^{5} \mathrm{~S} \mathrm{~cm}^{-1}$. Calculate its molar conductivity. If $\boldsymbol{\lambda}^{0}{ }_{\mathrm{m}}$ for $\quad \mathrm{CH}_{3} \mathrm{COOH}$ is $390.5 \mathrm{~S} \mathrm{~cm}^{2} \mathrm{~mol}^{-1}$, calculate its dissociation constant.

HOLIDAY H.W.
MACRO-ECONOMICS
CLASS-XII

## VERY SHORT ANSWER(VSA)/MCQ:

## CHAPTER:I

1.Define stock variable. $\quad$.What is meant by real flow?
3.Define flow variable.
5.What is meant by money flow?
5.Why national income is a flow concept?
7.Which of the following is the consumption sector:
a.Households
b. Firms
c.Govt.
d.Foreign sector.
8. Which of the following is the producing sector?
a.Households b. Firms c.Govt. d.Foreign sector.
9.What is meant by circular flow of income?

## CHAPTER:II

1.Define factor income.
2. Define transfer income?
3.Define capital goods.
4. Define consumption goods.
5.Machine purchased by a firm is a final good or intermediate good?
6. Machines purchased by a dealer of machines is final good or intermediate good?
7. In final goods, no value is to be added. True or False.
8.Bus purchased by school is a final good or intermediate good. Give reason .
9.A car purchased by a Taxi driver is a capital good or consumer good. Give reason.
10. Define normal resident.
11. What will be the books purchased by a student and a book seller? Give reason.
12. Net Factor Income from abroad (NFIA) is the difference between factor income Received
$(R)$ from abroad and payments $(P)$ made to abroad .True or False.
13.Domestic income will be equal to national income when:
a.NFIA is positive. b.NFIA is negative c.NFIA is zero d.None of these..
14. Market price will be equal to factor cost when there is :
a. No direct tax
b.No indirect tax
c. No subsidy d. None of these.
15.Foreign embassies located in India are a domestic territory of India. True or False.
16.Financial relief to flood victims are a part of transfer income or factor income.
17.If factor cost is greater than market price, it means :
a.Indirect tax=subsidies
b.Indirect tax>subsidies
c. Indirect tax<subsidies
d.Indirect tax<-subsidies.
18. Refrigerator purchased by a confectionary shop is an example of:
a.Final good
b.Intermediate good
c.Capital good
d.Both (a) and (c)
19.Indian embassy located in USA is a domestic territory of :
a.India
b.USA
c.Both a \& b
d.None of the above
20.Sugar purchased by a sweet shop is an -----------good but when purchased by a consumer is a -good.
21.Addition to capital stock of an economy is termed as :
a.Investment
b.capital loss
c.consumption of fixed capital
d. all of these
22.Find the value of national income, if domestic income is Rs. 5000 and NFIA is Rs.(-) 800.
23.If indirect tax is Rs. 500 and subsidy is Rs.(-)50, the value of net indirect tax will be:
a. 350 b. 450 c. 550 d.None of these.
24.If gross value is Rs. 4000 and depreciation is Rs. 450 ,the net value will be:
a. 2550
b. 3550
c. 4550
d.None of these.
25.Find the following values:
a.Gross-Depreciation=---------------
b.Market price- net indirect tax=-----------
c.National- domestic=----------------
d.Net +depreciation=
f.Closing stock-opening stock=

# KENDRIYA VIDYALAYA COMMAND HOSPITAL 

## SUMMER VACATION HOLIDAY HOMEWORK

CLASS - XII

## DRAFTED BY - Dr. Mrs. Nabamita Chatterjee

## Question No. 1

Reading Comprehension - Have to solve in English Copy

## PASSAGE 13

1. You would bave seen an increasing amount of "junk mail" showing up in your e-mail box. The so-called harmless activities of a small number of people are increasingly becoming a serious problem for the Internet
2. Spam is the flooding of the Internet with many copies of the same message, in an attempt to force the message on people who would not otherwise choose to receive it.
. Spam is basically electronic junk mail or junk newsgroup postings. It is sometimes Span confused with any unsolicited e-mail. But an could hardly be called spam, even though it is unsolicited. Real spam is generally e-mail advertising for some product sent to a mailing list or newsgroup.
3. In addition to wasting people's time with unwanted e-mail, spam also eats up a lot of network bandwidth. There are many organisations and individuals who have taken it pon themselves to fight spam with a variety of techniques. The problem is that because the Internet is public, there is very little that can be done to prevent spam, just as it is impossible to prevent junk mail.
4. One of the most recent examples of large-scale spamming was the hoax Ericsson e-mail about a free give away, something most people just cannot resist. The letter begins with a claim that since Nokia is giving away telephones, Ericsson will respond by giving away brand new WAP phone. But the recipient must forward the letter to a minimum of 20 people to receive the phone. The letter is signed by Anna Swelund, Executive Promotion Manager for Ericsson Marketing. It was later discovered that there was no such person at Ericsson.
5. There are numerous instances of these e-mails being used maliciously by someone who has a grudge against an ex-spouse, a public official, a former teacher or someone else with an e-mail address. The person mentioned in the e-mail ends up with thousands of requests from people looking for confirmation that the e-mail-which they actually had nothing to do with-is true. Spamming works on our own greed to receive freebies. You are instructed by a total stranger (or a well meaning but not very bright friend) to forward a message you know nothing about, except for the fact that maybe a friend passed it along to you and about 90 of their other very close friends.
6. Very often the victim can receive so many e-mails (and sometimes faxes and phone calls in the more malicious cases) that they have to get a new e-mail box or phone numberthereby ruining established personal and professional communication channels, which was the original intent of the sender.
7. Most spam is commercial advertising, often for dubious products, get-rich-quick schemes, or quasi-legal services. It costs the sender very little to send-most of the costs are paic for by the recipient or the carriers rather than by the sender.
8. There are two main types of spam, and they have different effects on internet users. Cancellable usenet spam is a single message sent to 20 or more usenet newsgroups. Usenet spam is aimed at "lurkers", people who read newsgroups but rarely or never post and give their address away. Usenet spam robs users of the utility of the newsgroups by
overwhelming them with a barrage of advertiaing or other irrelevant posts, Furthermore, usenet spam subverts the ability of syatem administrators and owners to manage the topics they accept on their systems.
9. E-mail spam targets individual users with direct mail messages. They typically cost users money sum targets mdividual while the meter is running, so to speak.
10. There is not much really that can be done to protect yourself except that you can ensure your relative safety by creating internet e-mail accounts like Hotmail or Yahoo which can be easily and frequently changed. Further, these accounts also generally offer the option of blocking senders from whom you get spam and you can also opt to block e-mail which has been copied to more than 20 people.
11. One can also keep oneself informed about spammers through the Blacklist of Internet Advertisers, a popular report that describes the offending activities of spammers that routinely distribute large mailings via e-mail or post unwelcome advertising on newsgroups. You can also visit www.spam.abuse.net.
12. Another organisation devoted to countering the destructive effects of spam is MAPS or Mail Abuse Prevention System. If an offending spammer cannot be shut down, the spammer's ISP may contact MAPS with the subnet addresses allocated to the spammer so those specific addresses may be used instead of the IP address of the entire ISP.
The MAPS website at http://mail-abuse.org will yield more useful information on how to counter and control spam.
-Ruchi Singh
भेजना। irrelevant-umeramin,
questions:
A. Answer each of the questions given below by choosing $\quad(1 \times 5=5$ Marks $)$
option:
(i) Email spam victimises
(b) individuals
(a) group
(d) none of the above
(c) organisation
(b) net facility
(a) the utility of the newsgroups
(d) none of the above
(c) actual information
(iii) Name the organisation that counters (b) MAPS
(a) MASP
(d) MSAP
(iv) Who has to pay most of the costs of spam?
(a) Senders
(b) Receivers
(c) Carriers
(d) Either (ii) or (iii).
(v) Spams are ................... mails.
(a) solicited
(b) unsolicited
(c) single copy
(d) coloured
$(1 \times 6=6$ Marks
. Answer the following questions briefly:
(i) What is spam? What problems are caused to net surfers by spamming?
(i) What is spam? What problems are caused targe scale spamming.
(ii) Give an example of recent large
(iii) How does spamming work? Whom does it hit sender or receiver?
(iv) What are the two main types of spams and their effects on internet users?
(v) How can one protect oneself against spam? Give two options.
(vi) Who uses email spam frequently?
C. Answer any three of the following questions in $25-30$ words $\quad(2 \times 3=6$ Marks)
(i) How does spam create problems for the receivers?
(ii) Why do malicious persons use spam mails as fouls?
(iii) How are spam mails beneficial for the commercial advertising company?
(iv) How does Hotmail or Yahoo protect the users from the spammers?
D. Pick out the worde/phrases from the passage which are similar in meaning to the followings
( $1 \times 3=3$ Marka)
(i) a mischievous trick played on somebody for a joke (para 5)
(ii) disreputable or risky (para 8)
(iii) proof (para 6)

## Question No. 2

## Ek Bharat Shresht Bharat - Activity 3



|  | language of the paired States/UTs. |
| :--- | :--- |
| Suggested Name of the <br> Activity for Integration in <br> School Academic Calendar | Acculturation/ Utsanskaran |
| Suggested <br> Subjects/Curricular activities <br> for integration | Social Science, Languages |
| Suggested Participating <br> Grade(s) / Class(es) | Classes VI to XII |
| Description of Activity | - Optional language classes, only where feasible, for <br> learning the language of the States/UTs may be <br> organized in the schools. <br> - The teachers who are well versed in the language of <br> the paired States/UTs may be roped in for taking <br> optional classes either in face to face or online <br> mode. |
| - A Proficiency Certificate may be given to such |  |
| students and Appreciation Certificate to the |  |
| teachers who taught the paired States/UTs |  |
| language. |  |$|$| As per timetable during the academic year |  |
| :--- | :--- |
| Suggested Month / Day | - Linguistic Skills <br> - National Integration <br> - Spirit of Patriotism and Unity |
| Skills/Values to be Enhanced |  |

## Question No. 3

## Project:

## Topic - 'A Pandemic And The Second Surge'

Prepare it in English Classwork Copy \& It should contain Only 10
Pages

## Question No. 4

Questions ON Advertisement You have recently constructed a house with all the facilities in a posh area. As you have decided to give it on rent, draft a suitable advertisement for the 'To Let' column of a local daily. Invent all the necessary details and contact address.
You are the General Manager of Spencers and Maxwell (P) Ltd. of Kolkata. Write a suitable advertisement for the classified advertisements of The Times of India for suitable accommodation on rent to be used as branch office of your company.
2. You are S. Mohan of 65, Urban Estate, Karnal. You are looking for a house on reasonable rent in north Delhi where you have been transferred. Write out an advertisement for publication in a newspaper, giving essential details of your requirements.
You are running a real estate agency in South Delhi. Write an advertisement for Saturday 'Prime Estate' column of The Times of India, New Delhi, giving details of flats/bungalows available for rent
5. You are B.C. Rajan of 65, Mayur Vihar-I, Delhi-110091. You want to set up a small furniture factory-cum-sales-room in Gurgaon/Ghaziabad. Draft an advertisement seeking a suitable building on rent. Your advertisement is to be published in the 'Accommodation Wanted' columns of The Hindu.

## 5. EDUCATIONAL INSTITUTIONS

## Question No. 5

MCQ Questions

|  | Title | Y | Link |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Class XII Flamingo |  |  |  |
| 1 | The Last Lesson | 1 | The Last Lesson | https://forms.gle/Au7EiwahF6s4e9JF7 |
| 2 | Lost Spring | 1 | The Lost Spring | https://forms.gle/HfcjuBPpoPjRtqvF7 |
| 3 | Deep Water | 1 | Deep Water XII | https://forms.gle/z2mu3x3dUzaQ78Rj6 |
| 4 | The Rattrap | 1 | The Rattrap Class XII Ch. 4 Flamingo | https://forms.gle/5gmW1U5Pp2U8kr1t5 |
| 5 | Indigo | 1 | Indigo | https://forms.gle/Ax8hiN2XThtoWW8J9 |
| 6 | Poets and Pancakes | 1 | Poets and Pancakes | https://forms.gle/oEBk4HxiwaAkU39G7 |
| 7 | The Interview | 1 | The Interview | https://forms.gle/u7WpJc6vbAS8jvCy7 |
| 8 | Going Places (I-II) | 1 | Going Places | https://forms.gle/3difSggxFQjJMTKB9 |
| 9 | My Mother at Sixty-six | 1 | My Mother at 66 | https://forms.gle/raxdeEHGNLbRPF809 |
| 10 | An Elementary School Classroom in a slum | 1 | An Elementary school | https://forms.gle/dgusgxKTdry1euaj9 |
| 11 | Keeping Quiet | 1 | Keeping Quiet | https://forms.gle/FH9FSHWXBP4jw56u8 |
| 12 | A Thing of Beauty | 1 | A Thing of Beauty | https://forms.gle/inGh5KfyPRuYJjs8A |
| 13 | A Roadside Stand | 1 | A Roadside Stand | https://forms.gle/YoKdbDNXH6vNjHnM7 |
| 14 | Aunt Jennifer's Tigers | 1 | Aunt Jennifer's Tigers | https://forms.gle/kqVd7p2XMoe1t3QYA |
|  | General English | 1 | Using Tenses IX -XII | https://forms.gle/B8B1r8129XDiz5QS8 |


|  | Class XII Vistas (Supple.) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1 | The Third Level | 1 | The Third Level- XII | https://forms.gle/ZCcyN5uj1T7EmQfM8 |
| 2 | The Tiger King | 1 | The Tiger King - XII | https://forms.gle/U2K1JxBCHaRhdw2BA |
| 3 | Journey to the end of the Earth | 1 | Journey To the End of the Earth-XII | https://forms.gle/4Mtcw7mWXhN8CuHe9 |
| 4 | The Enemy | 1 | The Enemy | $\underline{\text { https://forms.gle/cGLN2ArBM61hF24v7 }}$ |
| 5 | Should Wizard Hit Mommy | 1 | Should wizard Hit Mommy | https://forms.gle/gayjTMdtnJKHuG1G9 |
| 6 | On the face if It | 1 | On the face of It | $\underline{\text { https://forms.gle/huLcdwuzfcMptT2j6 }}$ |
| 7 | Evan Tries an O level | 1 | Evan Tries an O level | https://forms.gle/GXEZEX4g9iUUHbhY9 |
| 8 | Memories of Childhood (I-II) | 1 | Memories of Childhood | $\underline{\text { https://forms.gle/YZ7Mnzm5N2NT14ot9 }}$ |

## Question No. 6

Students of Class - XII HUMANITIES, Have to prepare a (E Book) on Flamingo Poems [Group Project]:

## POEMS:

1) My mother at sixty six
2) An elementary school classroom in a slum
3) Keeping quiet
4) A thing of beauty
5) Aunt Jennifer's Tigers

Students of Class - XII COMMERCE, Have to prepare a (E Book) on Vistas
Prose [Group Project]:

## PROSE:

1) The third level
2) The enemy
3) Should wizard hit mommy
4) On the face of it
5) Evans tries an O-Level

Students of Class - XII SCIENCE, Have to prepare a (E Book) on Flamingo Prose [Group Project]:

## PROSE:

1) The last lesson
2) Lost spring
3) Deep water
4) The ratirap
5) Indigo

5 Groups were made and they were divided according to the roll no.

- Roll No. 1-10 (first group)

First poem or prose of Flamingo \& Vistas

- Roll No. 11-15 (Second Group)

Second poem or prose of Flamingo \& Vistas

- Roll No. 16-20 (Third Group)

Third poem or prose of Flamingo \& Vistas

- Roll No. 21-30 (Fourth Group)

Fourth poem or prose of Flamingo \& Vistas

- Roll No. 31 - Rest all (Fifth Group)

Fifth poem or prose of Flamingo \& Vistas
Each and every group is having a leader who will collect all the information from their Group Members and will compile the whole

## Here Are Some Samples:

 other associated software

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## Contents

1. Thacstory of king Volpari - Tamit 1

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r*ayasthan:
A Happy Coviple - Pienyato
Dutkn Ehamjan Ekci - Punjabi

Teltagu
The Gozirs andet xpe Jeqctseat
Avoracth:

Thank pefore You Acr-Hinct
1 A A Footish Oonticy
12 - This viorlict - Haryatruv.
13 Golcten Vessel- Himet
14. The Farmer and tiss Four Sons

15- The Scifish Horse- kammeacter


I am happy to share a wornderful folktale which my granny told me today. The story is about the king Velpaari who lived in $z^{n}$ century Be. king paaris reference is seen in all the forms of Tamil literature King Paari is called as Vel Paari and he was farmous for his moble generosity and charity. He ruled the moumtair city called Perambu Malai. In olden days there was a custom that when the grea poets rendered their verses in king's homour and in return the king honoured

## Easily add text in PDF

Add
tiny creeper plant which did not have any support to climb. The dimber plant was lying down on the ground. King Paari felt as though the climber plant was talking to him and requesting him to provide support. King saw the dimber plant moving hither and thither in the wind which melted his heart.

$$
\text { SC } 2020 \text { for TGTs English, KUS ZIET Mumbal }
$$

| 910 | Arasar | King |
| :---: | :---: | :---: |
| ㄴலை市 | Pulavar | Poet |
| ¢क ர் | Thaer | Chariot |
| 3市105 | Dharmam | Charity |
| 3)패에 | Aatchi | Ruale fak |

The king immediately got down from the chariot. He asked the chariot driver to remove the horse from the chariot. Then he brought the chariot near the dimber plant and lifted the plant to spread its tender stems on the chariot in order to provicie a support to the little plant. The noble king Paari gave his own muge chariot to the little climber plant.

He walked the rest of the distance to reach his palace. The news about king Paari's great mercy to a small plant spread to the other kingdoms and countries. From then on, he was called as the generous king Paari. Though the king lived in Znd century BC, we still remember him for his noble deed. King paari is the synonym for charity and generosity. I learnt the value that we should be compassionate not only to our fellow human beings, but also to all the living beings around us.


> Teacher Guide: Mrs. K Hemalatha TGT English, KV valzaire

ISC 2020 for TGTS Enelish. KVS ZIET Mumbal


1 arn happy to share a wonderful folktale which my granny told me today． The story is about the king Velpaari who lived in $z^{\text {ned century Be king paris }}$ reference is seen in all the forms of Tamil Iiterature King Paari is called as Vel Paari and the was farnous for his noble generosity and charity．He ruled the moumtain city called Perambu Malai．In olden days there was a custom that when the great poets rendered their verses in king＇s honour and in return the king honoured then with a jevvel arnd a few gold coins．But do you know what the kirng paari gave them？He gifted them heaps of jewels and gold coins．So many poets from across the world came to visit Paari to cherish his charity．Ornce paarivvas returning to his Kingdom through a forest in his horse drawn chariot on the way he sava timy creeper plant which did not have any support to climb．The climber plant was lying down on the ground．King Paari felt as though the climber plant was talking to him and requesting him to provide support．King saw the dimber plant moving hither and thither in the wind which melted his heart

ISC 2020 for TGTS English，KVSZIET Mumbal

| C－15 AF ⿺尢丶 | Arasar | King |
| :---: | :---: | :---: |
| Hலツ冂1 | Pulavar | Poet |
| ¢ 3 戈 | Thamer | Chariot |
| 边立以 | Dharmarn | Charity |
| estics | Aatchi | Rule fa kil |

The king immediately got down from the chariot He asked the chariot driver to remove the horse from the chariot．Then he brought the chariot mear the dimber plant and lifted the plant to spread its tender stems on the chariot in order to provide a support to the little plant The noble king paari gave his ovnn huge chariot to the little climber plant．

He walked the rest of the distance to reach his palace．The news about king Paari＇s great mercy to a small plant spread to the other kingaioms and countries．From then on，he was called as the generousking paari．Though the king lived in Znd century BC，we still remember him for his noble deed．
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## HAVE A SAFE AND HAPPY VACATION

## CLASS XII HISTORY LIST OF MAP ITEMS WITH FILLED MAPS

LIST OF MAPS

|  |  |  |
| :---: | :---: | :---: |
| 1 | Page 2 | Mature Harappan sites: <br> - Harappa, Banawali, Kalibangan, Balakot, Rakhigarhi, Dholavira, Nageshwar, Lothal, Mohenjodaro, Chanhudaro, KotDiji. |
| 2 | Page 30 | Mahajanapada and cities : <br> - Vajii, Magadha, Kosala, Kuru, Panchala, Gandhara, Avanti, Rajgir, Ujjain, Taxila, Varanasi. |
| 3 | Page 33 | Distribution of Ashokan inscriptions: <br> - Kushanas, Shakas, Satavahanas, Vakatakas,Guptas <br> - Cities/towns: Mathura, Kannauj, Braghukachchha <br> - Pillar inscriptions -Sanchi, Topra, Meerut Pillar and Kaushambi. <br> - Kingdom of Cholas, Cheras and Pandyas. |
| 4 | Page 43 | Important kingdoms and towns: <br> - Kushanas, Shakas, Satavahanas, Vakatakas,Guptas <br> - Cities/towns: Mathura, Kanauj, Puhar, Rajgir, Vaishali, Varanasi,Vidisha |
| 5 | Page 95 | Major Buddhist Sites:Nagarjunakonda, Sanchi, Amaravati, Lumbini, Nasik, Bharhut, BodhGaya, Ajanta. |
| Book 2 |  |  |
| 1 | Page 174 | Bidar, Golconda, Bijapur, Vijayanagar, Chandragiri, Kanchipuram, Mysore, Thanjavur, Kolar |
| 2 | Page 214 | Territories under Babur, Akbar and Aurangzeb: <br> - Delhi, Agra, Panipat, Amber, Ajmer, Lahore, Goa. |
| Book 3 |  |  |
| 1 | Page 297 | Territories/cities under British Control in1857: <br> - Punjab, Sindh, Bombay, Madras Fort St. David, Masulipatam, Berar, Bengal, Bihar, Orissa, Avadh, Surat, Calcutta, Daccan, Chitagong, Patna, Benaras, Allahabad and Lucknow. |
| 2 | Page 305 | Main centres of the Revolt of 1857 : <br> - Delhi, Meerut, Jhansi, Lucknow, Kanpur, Azamgarh, Calcutta, Benaras, Gwalior, Jabalpur, Agra,Avadh. |
|  |  | Important centres of the National Movement: <br> - Champaran, Kheda, Ahmedabad, Benaras, Amritsar, ChauriChaura, Lahore, Bardoli, Dandi, Bombay (Quit India Resolution). Karachi. |




## Chapter 2

Kings, Farmers and Towns







## Chapter 11

## Rebels and The RaJ



## Chapter 11

MAHATAMA GANDHI AND The Nationalist Movement


