

CLASS-XII(MATH'S HOLIDAY'S HOMEWORK)

1. Do chapter wise assignment of ch-1,2,3,4
2. Revise same chapter from N.C.E.R.T and from EXTRA BOOK
3. Prepare 20 question (10 one marks, 10 two marks) according your group

RMD

2. Framing 100 Objective Type Questions-Answers from Unit -2 includes Java.
3. Design in Practical File:-
 - (a) Write 20 Java Programs in Practical File
 - (b) Design a project on any application in Java on the following topics:
Report Card, Payroll of Employee etc

Holiday Day Homework of Art

12th

Theory

Unit Test Syllabus Revision
Short Ans

Rajasthan School Of Art
Pahari School Of Art

Practical

3 sheet Landscape in Art File
2 Sheet Still Life in Art file

Kali Ram D A V Public School, Safidon

Class XII (English)

Holiday's Homework

1. **READING SECTION** - Evergreen Test Assignment-1 to 5 (pg. no. 27-41)

2. **WRITING SECTION** -

Notice Writing - Evergreen Test Assignment-3 (pg. no. 138)

Topic - Informing students of a proposed visit to some historical sites.

Inviting students to participate in Science Exhibition.

Article Writing-Evergreen Test Assignment-26, 27 (pg. no. 239, 241)

Topic - Havoc caused by nature.

Problems of Burning of paddy stubble.

Letter Writing -Evergreen Test Assignment -10 ,12 (pg. no. 198, 202)

Topic - To place an order for musical instruments.

Complaint Letter about the delay in the supply of 12th class books.

Speech Writing - Evergreen Test Assignment -34 (pg. no. 261,262)

Topic – Beauty of India lies in diversity.

Speed thrills but kills

Report Writing - Evergreen Test Assignment -42 (pg. no. 289, 290)

Topic -A Horrible Tragedy

A Cricket Match

3. **LITERATURE SECTION** – Learn Lessons discussed in class

Flamingo– Lesson -1 ,2 ,3

Poem – 1, 2

Vistas -Lesson -1, 2, 3

K.R.D.A.V.PUBLIC SCHOOL

HOLIDAY HOMEWORK

CHEMISTRY XII

- 1 Calculate the freezing point of a solution containing 60 g of glucose (Molar mass = 180 g mol⁻¹) in 250 g of water. (K_f of water = 1.86 K kg mol⁻¹)
- 2 For the reaction $2\text{N}_2\text{O}_5(\text{g}) \longrightarrow 4\text{NO}_2(\text{g}) + \text{O}_2(\text{g})$, the rate of formation of NO₂ (g) is $2.8 \times 10^{-3} \text{ M s}^{-1}$. Calculate the rate of disappearance of N₂O₅ (g)
- 3 Give reasons for the following :
- Measurement of osmotic pressure method is preferred for the determination of molar masses of macromolecules such as proteins and polymers.
 - Aquatic animals are more comfortable in cold water than in warm water.
 - Elevation of boiling point of 1 M KCl solution is nearly double than that of 1 M sugar solution.
- 4 A first order reaction is 50% completed in 40 minutes at 300 K and in 20 minutes at 320 K. Calculate the activation energy of the reaction. (Given : log 2 = 0.3010, log 4 = 0.6021, R = 8.314 JK⁻¹ mol⁻¹)
- 5 What happens when
- a freshly prepared precipitate of Fe(OH)₃ is shaken with a small amount of FeCl₃ solution ?
 - persistent dialysis of a colloidal solution is carried out ?
 - an emulsion is centrifuged ?
- 6 Write the cell reaction and calculate the e.m.f. of the following cell at 298 K :
- Sn (s) | Sn²⁺ (0.004 M) || H⁺ (0.020 M) | H₂ (g) (1 bar) | Pt (s)
- (Given : E⁰_{Sn²⁺/Sn} = -0.14 V)
- 7 Give reasons :
- On the basis of E⁰ values, O₂ gas should be liberated at anode but it is Cl₂ gas which is liberated in the electrolysis of aqueous NaCl.
 - Conductivity of CH₃COOH decreases on dilution
- 8 For the reaction
- $$2\text{AgCl}(\text{s}) + \text{H}_2(\text{g}) (1 \text{ atm}) \longrightarrow 2\text{Ag}(\text{s}) + 2\text{H}^+(\text{aq}) (0.1 \text{ M}) + 2\text{Cl}^-(\text{aq}) (0.1 \text{ M}),$$
- $\Delta G^0 = -43600 \text{ J}$ at 25 °C.
- Calculate the e.m.f. of the cell.
- [log 10ⁿ = n]
- 9 Define fuel cell and write its two advantages
- 10 What is the effect of adding a catalyst on
- Activation energy (E_a), and
 - Gibbs energy (ΔG) of a reaction ?
- 11 What type of colloid is formed when a liquid is dispersed in a solid ? Give an example.
- 12 Write the name of the cell which is generally used in hearing aids. Write the reactions taking place at the anode and the cathode of this cell
- 13 (a) The cell in which the following reaction occurs :
- $$2\text{Fe}^{3+}(\text{aq}) + 2\text{I}^-(\text{aq}) \longrightarrow 2\text{Fe}^{2+}(\text{aq}) + \text{I}_2(\text{s})$$
- has E⁰ cell = 0.236 V at 298 K. Calculate the standard Gibbs energy of the cell reaction. (Given : 1 F = 96,500 C mol⁻¹)
- How many electrons flow through a metallic wire if a current of 0.5 A is passed for 2 hours ? (Given : 1 F = 96,500 C mol⁻¹)
- 14 Write one difference in each of the following :
- Multimolecular colloid and Associated colloid
 - Coagulation and Peptization
 - Homogeneous catalysis and Heterogeneous catalysis
- 15 (a) Write the dispersed phase and dispersion medium of milk.
- Write one similarity between physisorption and chemisorption.

- (c) Write the chemical method by which $\text{Fe}(\text{OH})_3$ sol is prepared from FeCl_3 .
- 16 A first order reaction takes 20 minutes for 25% decomposition. Calculate the time when 75% the reaction will be completed (Given : $\log 2 = 0.3010$, $\log 3 = 0.4771$, $\log 4 = 0.6021$)
- 17 (a) A 10% solution (by mass) of sucrose in water has a freezing point of 269.15 K. Calculate the freezing point of 10% glucose in water if the freezing point of pure water is 273.15 K. Given : (Molar mass of sucrose = 342 g mol⁻¹), (Molar mass of glucose = 180 g mol⁻¹)
- (c) Define the following terms : (i) Molality (m) (ii) Abnormal molar mass
- 18 (a) 30 g of urea ($M = 60 \text{ g mol}^{-1}$) is dissolved in 846 g of water. Calculate the vapour pressure of water for this solution if vapour pressure of pure water at 298 K is 23.8 mm Hg.
- (b) Write two differences between ideal solutions and non-ideal solutions.
- 19 Calculate the time to deposit 1.5 g of silver at cathode when a current of 1.5A was passed through the solution of AgNO_3 . (Molar mass of Ag = 108 g mol⁻¹, 1 F = 96500 C mol⁻¹)
20. (i) Why are aquatic species more comfortable in cold water than in warm water? (ii) What happens when we place the blood cell in saline water solution (hypertonic solution)? Give reason
- 21 Vapour pressure of water at 20°C is 17.5 mm Hg. Calculate the vapour pressure of water at 20°C when 15 g of glucose (Molar mass = 180 g mol⁻¹) is dissolved in 150 g of water.
- 22 Define adsorption with an example. Why is adsorption exothermic in nature? Write the types of adsorption based on the nature of forces between adsorbate and adsorbent.
23. For the hydrolysis of methyl acetate in aqueous solution, the following results were obtained:
- | | | | |
|---|------|------|------|
| t/s | 0 | 30 | 60 |
| (CH ₃ COOCH ₃)/mol L ⁻¹ | 0.60 | 0.30 | 0.15 |
- (i) Show that it follows pseudo first order reaction, as the concentration of water remains constant. (ii) Calculate the average rate of reaction between the time interval 30 to 60 seconds.
- 24 (a) For a reaction $\text{A} + \text{B} \rightarrow \text{P}$, the rate is given by $\text{Rate} = k [\text{A}]^2 [\text{B}]$ (i) How is the rate of reaction affected if the concentration of A is doubled? (ii) What is the overall order of reaction if B is present in large excess? (b) A first order reaction takes 23.1 minutes for 50% completion. Calculate the time required for 75% completion of this reaction. (Given : $\log 2 = 0.301$, $\log 3 = 0.4771$, $\log 4 = 0.6021$)
25. State Kohlrausch law of independent migration of ions. Why does the conductivity of a solution decrease with dilution?
- 26 (a) Calculate $r\Delta G^\circ$ for the reaction $\text{Mg}^{2+}(\text{aq}) + \text{Cu}(\text{s}) \rightarrow \text{Mg}(\text{s}) + \text{Cu}^{2+}(\text{aq})$ Given : $E^\circ_{\text{cell}} = +2.71 \text{ V}$, 1 F = 96500 C mol⁻¹ (b) Name the type of cell which was used in Apollo space programme for providing electrical power.
- 27 What are emulsions? What are their different types? Give one example of each type.
28. (a) Define the following terms : (i) Molarity (ii) Molal elevation constant (K_b) (b) A solution containing 15 g urea (molar mass = 60 g mol⁻¹) per litre of solution in water has the same osmotic pressure (isotonic) as a solution of glucose (molar mass = 180 g mol⁻¹) in water. Calculate the mass of glucose present in one litre of its solution.
- 29 (a) What type of deviation is shown by a mixture of ethanol and acetone? Give reason. (b) A solution of glucose (molar mass = 180 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 g mL⁻¹)
- 30 For a reaction: $2\text{NH}_3 \rightarrow \text{N}_2 + 3\text{H}_2$ Rate = k (i) Write the order and molecularity of this reaction. (ii) Write the unit of k.
- 31 The rate constant for the first order decomposition of H_2O_2 is given by the following equation: $\log k = 14.2 - 4 \times 10^4 \text{ K/T}$ Calculate E_a for this reaction and rate constant k if its half-life period be 200 minutes. (Given: $R = 8.314 \text{ JK}^{-1} \text{ mol}^{-1}$)
32. Define the following terms: (i) O/W Emulsion (ii) Zeta potential (iii) Multimolecular colloids
33. Calculate the boiling point of solution when 2 g of Na_2SO_4 ($M = 142 \text{ g mol}^{-1}$) was dissolved in 50 g of water, assuming Na_2SO_4 undergoes complete ionization. (K_b for water = 0.52 K kg mol⁻¹)
- 34(a) The conductivity of 0.001 mol L⁻¹ solution of CH_3COOH is $3.905 \times 10^{-5} \text{ S cm}^{-1}$. Calculate its molar conductivity and degree of dissociation (α). Given $\lambda^\circ(\text{H}^+) = 349.65 \text{ cm}^2 \text{ mol}^{-1}$ and $\lambda^\circ(\text{CH}_3\text{COO}^-) = 40.95 \text{ cm}^2 \text{ mol}^{-1}$ (b) Define electrochemical cell. What happens if external potential applied becomes greater than E°_{cell} of electrochemical cell?
- 35 project

Summer Holidays home work Class 12th
Subject Accountancy

Revise the numericals (B,ex and illustration) and learn V,S,A of the following chapters:

- (i) Partnership Fundamentals
- (ii) Change in profit sharing ratios
- (iii) Admission of a partner
- (iv) Retirement of a partner

Prepare Practical file on the following :

- 1 comprehensive problem
 - Journal entry
 - Ledgers
 - Trial Balance
 - Trading & profit and Loss A/c
 - Balance Sheet
 - conclusions
- 2 Cash flow Statement

ECONOMICS HOLIDAY HOMEWORK

CLASS-12th

1] Prepare a project file on any topic related to your syllabus or choose any topic that are given below-

- Food supply channel in India
- Goods and Services Tax Act and its impact on GDP
- Self – help group
- Digital India – Step towards the future
- Make in India – The way ahead
- Health Expenditure [of any state]
- Micro and small scale industries
- Organic Farming – Back to the nature

2] Learn full syllabus which have been completed in your class.

3] Practice 30 numericals of chapter-National Income. [10 numericals from each method].

ECONOMICS HOLIDAY HOMEWORK

CLASS-11th

1] Prepare a project file on any topic related to your syllabus or choose any topic that are given below-

- *Food supply channel in India*
- *Goods and Services Tax Act and its impact on GDP*
- *Self – help group*
- *Digital India – Step towards the future*
- *Make in India – The way ahead*
- *Health Expenditure [of any state]*
- *Micro and small scale industries*
- *Organic Farming – Back to the nature*

2] Learn full syllabus which have been completed in your class.

ECONOMICS HOLIDAY HOMEWORK

CLASS-12th

1] Prepare a project file on any topic related to your syllabus or choose any topic that are given below-

- Food supply channel in India
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[10 numericals from each method].

KR DAV PUBLIC SCHOOL, SAFIDON

HOLIDAYS HOME WORK

BUSINESS STUDIES

XII

Write and Learn the following questions:-

1. What is meant by Management? State the objectives of management.
2. "Coordination is the essence of management". Do you agree? Give reasons.
3. Explain the Principles of Management given by Fayol.
4. Discuss the following techniques of Scientific work study:-
 - (a) Time Study
 - (b) Motion Study
 - (c) Fatigue Study
 - (d) Method Study
 - (e) Simplification and standardization of work.
5. "Management is a science like physics or chemistry. Do you agree with this statement? Give reasons in support of your answer.

CASE STUDY RELATED QUESTION:

1. Three groups of employees of 'Gama Limited' are working at different posts. The first group of employees is responsible for the welfare and survival of the organization. In order to discharge its responsibility properly, this group continuously keeps a watch over the Business environment with a view to coping with the changes going on in the business environment, this group immediately discusses the change to be brought about in the company's plans.

The second groups of employees are responsible for maintaining quality and safety standards and minimizing wastage.

The responsibility of third group of employees is to explain the policies decided by the top management and developing the feeling of cooperation among all the departments of the company.

- (a) Identify the concept of management described in the paragraph given above.
 - (b) Identify the three types of the concept identified in 'a' by quoting the relevant lines.
2. Hina and Harish are typists in a company having the same educational qualification. Hina is getting ₹3,000/- per month and Harish ₹4,000/- per month as salary for the same working hours. Which principle of management is violated in this case? Name and explain the principle.

PROJECT WORK

1. To make project on Principles of management.
2. Also learn VSA type questions of unit I & II

HOLIDAYS HOMEWORK PHYSICS (XII)

- 1) Learn all lessons.
- 2) Solve given assignments.
- 3) Practice previous year question papers
- 4) Make the project

HOLIDAYS HOME WORK

class XII medical	Biology	learn ch- 1 to 3 make one project on any topic from unit I to V
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