



مدارس دارة السلام العالمية - الرياض

**Daratassalam International,  
Delhi Public School – Riyadh**  
**Summer Holiday Homework (2024)**  
**Grade: XII**



## CHEMISTRY

**Complete the following assignment in small note book.**

- (a) Explain the following phenomena with the help of Henry's law.
  - Painful condition known as bends.
  - Feeling of weakness and discomfort in breathing at high altitude.(b) Why does soda water bottle kept at room temperature fizzes on opening?
- If  $O_2$  is bubbled through water at 393 K, how many millimoles of  $O_2$  gas would be dissolved in 1L of water? Assume that  $O_2$  exerts a pressure of 0.95 bar. (Given  $K_H$  for  $O_2 = 46.82$  bar at 393K).
- Derive the relationship between molar mass and elevation in boiling point.
- Find the molality and molarity of a 15% solution of  $H_2SO_4$  when its density is  $1.10 \text{ g/cm}^3$  & molar mass = 98 amu.
- 18 g of glucose ( $C_6H_{12}O_6$ ) is dissolved in 1 kg of water in a saucepan. At what temperature will water boil at 1.013bar?  $K_b$  for water is  $0.52 \text{ K Kg mol}^{-1}$
- When a certain conductance cell was filled with 0.1 M KCl, it has a resistance of 85 ohms at  $25^\circ\text{C}$ . When the same cell was filled with an aqueous solution of 0.052 M unknown electrolyte, the resistance was 96 ohms. Calculate the molar conductance of the electrolyte at this concentration. [Specific conductance of 0.1 M KCl =  $1.29 \times 10^{-2} \text{ ohm}^{-1} \text{ cm}^{-1}$ ]
- Calculate the degree of dissociation ( $\alpha$ ) of acetic acid if its molar conductivity ( $\Lambda_m$ ) is  $39.05 \text{ S cm}^2 \text{ mol}^{-1}$ .
- Write the chemical equations to illustrate each of the following name reactions:**
  - Markonikov's reaction
  - Wurtz reaction
  - Wurtz-Fittig reaction
  - Peroxide effect
  - Fittig reaction
  - Swarts reaction
  - Friedel Crafts acylation
  - Kolbe's reaction
  - Reimer-Tiemann reaction
  - Friedel Crafts alkylation
  - Williamson Synthesis
- Account for the following:**
  - Alcohols are comparatively more soluble in water than hydrocarbons of comparable molecular masses. Explain this fact.
  - Phenol is more acidic than ethanol.
  - Alkyl halides though polar, are immiscible with water.
- Complete the exercise (numerical questions) in the completed chapters.

## PHYSICS

1. Learn the completed portion
2. Do all the solved examples of Ch 1- 7
3. Make an investigatory project for CBSE practical exam.

## MATHEMATICS

Complete the following activities in your mathematics record book from the book **Mathematics Lab Activity for class 12.**

Activity Nos. 1, 3, 5, 7, 9, 10, 13, 16, 17, 18, 21, 22, 26, 27.

## BIOLOGY

1. To prepare an investigatory project on the topic given
2. To complete the practical record.

## ENGLISH

S. No.	Subjects	Assignments
1	Literature	Keeping Quiet {Poem}
2	Literature	Research on Pablo Neruda life & his work
3	Advanced Writing Skills	Write an article on any of the topics.
4	Advanced Writing Skills	Draw poster on the following topics.

### GENERAL INSTRUCTIONS

1. Write the summary of the poem **“Keeping Quiet”** and Research thoroughly on the life and works of **Pablo Neruda** as an English Poet, his collection of poetry, awards and recognition. {Word Limit 200—250}
2. Read the poem, **“Keeping Quiet”** {Flamingo} & make notes on it. {Word Limit 200—250}
3. Write an article on any **ONE** of the following topics. {Word Limit 200—250}

1	Importance of Personality Development
2	Role of Students In National Development
3	Importance of Effective Communication Skills

4. Draw poster on any ONE of your favourite topics. It must be decorated with photographs or hand-made portraits. {Word Limit 50—100}

Blood Donation Camp organised by your school	Adventure Sports And Eco Tourism
Importance of Health and Benefits of Exercises	Value of Books and Good Reading Habits.

**NOTE:** All the assignments must be handwritten in neat and intelligible way in the English Note Book.

**No print out shall be entertained. Prepare the poster on a chart paper.**

## COMPUTER SCIENCE

- Revise for Half Yearly Examination 2024 (till Chapter 9 - Data Structures).
- Complete, practice and learn the Question & Answer and Class Note Book.
- Complete Practical File for Chapters 1, 2, 3, 4, 5, 8 and 9 in Computer Science with Python Practical File.
- Practice Programming for Chapters 1 to 9.

## ACCOUNTANCY

1. A firm's profits for the last five years were ₹20,000; ₹30,000; ₹40,000; ₹50,000; and ₹60,000. Calculate the value of firm's goodwill on the basis of three years' purchase of weighted average profits after using weight of 1,2,3,4, and 5 respectively.
2. A partnership firm earned net profits during the last three years as follows:

Year	Net Profit (₹)
2020-2021	1,90,000
2021-2022	2,20,000
2022-2023	2,50,000

The capital employed in the firm throughout the above mentioned period has been ₹4,00,000. Having regards to the risk involved, 15% is considered to be a fair return on the capital. The remuneration of all the partners during this period is estimated to be ₹1,00,000 per annum.

Calculate the value of goodwill on the basis of (i) two years' purchase of super profit earned on average basis during the above mentioned three years and (ii) by capitalization method.

3. Sharma, Verma and Khan were partners in a firm sharing profits and losses in 5:3:2 ratio. They decided to share the future profits equally. For this purpose, the goodwill of the firm was valued at ₹1,20,000. Pass an adjustment entry for the treatment of goodwill due to change in the profit- sharing ratio.

4. Ravi, Shammi, Shashi are partners sharing profits and losses in ratio of 5:3:2. They decided to share future profits and losses in the ratio 2:3:5 with effect from 1<sup>st</sup> April, 2024. Following items appear in the Balance Sheet as at 31<sup>st</sup> March, 2023: General Reserve ₹1,50,000 Advertisement Suspense A/c (Dr) ₹1,00,000 Contingencies Reserve ₹50,000 Profit and Loss Account (Dr.) ₹75,000 . **Pass necessary Journal entries.**

5. Rini and Nikita are in partnership sharing profits in the raio of 2:3. With effect from 1<sup>st</sup> April, 2024 they agreed to share profits in the ratio of 1:2. For this purpose, the goodwill of the firm is to be valued at ₹6,80,000. The reserves appear in the books at ₹2,20,000. Partners neither want to show the goodwill in the books nor to distribute the reserves. You are required to give effect to the change by passing a single Journal Entry.

6. Ramesh, Suresh and Dinesh are partners sharing profits and losses in the ratio of 4:3:2., decided to share the future profits and losses in the ratio of 2:3:4 with effect from 1<sup>st</sup> April, 2024.

An extract of their Balance Sheet as at 31<sup>st</sup> March, 2024 is

<b>Liabilities</b>	₹	<b>Assets</b>	
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Workmen Compensation Reserve	1,80,000		
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**Case 1.** If there is no other information.

**Case 2.** If a claim on account of workmen compensation is estimated at ₹90,000

**Case 3.** If a claim on account of workmen compensation is estimated at ₹1,98,000

7. X, Y and Z are partners sharing profits equally. They decided that in future Z will get 1/5<sup>th</sup> share in profits. On the day of change, following is their Balance Sheet:

Liabilities		Assets	
Creditors	1,80,000	Cash	6,000
Capital A/cs:		Debtors	22,500
X 12,500		Less: Reserve	<u>4,000</u>
Y 12,500		Stock	12,500
Z 9,000	34,000	Machinery	5,400
		Buildings	10,000
	52,400		52,400

On this date, Buildings have been valued at ₹15,000, stock to be reduced by ₹1,500 and reserve for doubtful debts to be reduced by ₹1,000.

Pass Journal entries in the books of the firm regarding the revaluation of assets.

Prepare necessary Ledger Accounts and Balance Sheet.

8. From the following information. Calculate the value of goodwill of a firm of Chander and Gupta:

- At 3 years' purchase of average profits,
- At 3 years' purchase of super profits,
- Average capital employed in the business ₹7,00,000.
- Net trading results of the firm for the past years; Profit 2020 - ₹1,47,600; Loss 2021-₹1,48,100; Profit 2022 - ₹4,48,700.
- Rate of interest expected from capital having regard to the risk involved 18%.
- Remuneration to each partner for his service ₹500 per month.

9. A, B and C were partners in a firm sharing profits in the ratio of 2:2:1. Their Balance Sheet as at 31<sup>st</sup> March, 2024 was as follows

**Balance Sheet As at 31<sup>st</sup> March, 2024**

Liabilities		Assets	
Creditors	30,000	Land	85,000
Bills Payable	20,000	Buildings	50,000
Outstanding Expenses	25,000	Plants	1,00,000
General Reserve	50,000	Stock	40,000
Capital A/cs:		Debtors	25,000
A 50,000		Cash	5,000
B 60,000			
C <u>70,000</u>	1,80,000		
	3,05,000		3,05,000

From April 1, 2024 the partners decided to share profits in the ratio of 1:2:3. For this purpose, it was agreed that:

- The goodwill of the firm should be valued at ₹60,000.
- Land should be revalued at ₹1,00,000. Building should be depreciated by 6%.

c. Creditors amounting to ₹3,000 were not paid. It was decided among the partners that General Reserve has to be distributed among the partners whereas goodwill and revised values of

d. assets and liabilities are not be recorded in the books. You are required to:  
Record the necessary journal entries to give effect to the above agreement.

## **PART B**

Project Work One specific project based on financial statement analysis of a company covering any two aspects from the following:

1. Comparative and common size financial statements
2. Accounting Ratios
3. Segment Reports
4. Cash Flow Statements

## **ECONOMICS**

<b>NAME OF THE PROJECTS</b>	<b>NAME OF THE STUDENTS</b>
<b>NATIONAL INCOME</b>	<b>ABDULLAH</b>
<b>MONEY AND BANKING</b>	<b>PARTH AND MEER ALI</b>
<b>AGGREGATE DEMAND AND SUPPLY</b>	<b>SINAN</b>
<b>GOVERNMENT BUDGET</b>	<b>FAHYAN</b>
<b>FOREIGN EXCHANGE</b>	<b>RAKSHAN AND IBRAHIM</b>
<b>FORMS OF MARKET</b>	<b>ARHAM</b>

The project report should be developed in the following sequence-

- The cover page should include the title of the Project, student information, school and year.
- List of contents
- Acknowledgements and preface (acknowledging the institution, the places visited and the persons who have helped).
- Introduction.
- Topic with a suitable heading.
- Planning and activities are done during the project, if any.
- Observations and findings of the visit.
- Conclusions (summarized suggestions or findings, the future scope of the study).
- Photographs (if any).
- Appendix
- Teacher's observation.
- Signatures of the teachers.
- At the completion of the evaluation of the project, it should be punched in the centre so that the report may not be reused but is available for reference only.
- The project will be returned after evaluation. The school may keep the best projects.

## **BUSINESS STUDIES**

### **I. Question and Answers.**

#### 1. CHAPTER 4 – PLANNING

- A. Planning reduces creativity – Comment.
- B. What are the steps taken by the management in the planning process?
- C. Differentiate between single use plan and standing plan with examples.

#### 2. CHAPTER 5 – ORGANISING

- A. What does the term 'span of management' refer to? B. Distinguish between delegation and decentralization. C. What are steps in the process of organizing?

### **II. Project Work – MARKETING**

Students are required to identify one product/service which the students may like to manufacture/provide. The students are required to make a project on the identified product/service.

On the basis of the work done by the students the project report should include the following:

1. Type of product /service identified and the (consumer/industries) process involved there in.
2. Reason for selecting the particular product/service
3. Identify at least 5 competitor brands already existing in the market.
4. What is going to be your USP?
5. Brand name and the product.
6. Range of the product.
7. Identification mark or logo.
8. Tagline, if any.
9. Labeling and packaging.
10. Price of the product and basis of price fixation.
11. Selected channels of distribution and reasons thereof.
12. Decisions related to transportation and warehousing. State reasons.
13. Promotional techniques used and starting reasons for deciding the particular technique.
14. Grading and standardization

**Following essentials are required to be fulfilled for its preparation and submission.**

1. The total length of the project will be of 25 to 30 pages.
2. The project should be handwritten.

The project should be presented in a neat folder.

### **Subject: Physical Education**

"Make a project on game which you have opted".