

SECTION "B" (Short Answer Question) Marks: 24

NOTE: Answer any EIGHT questions from this section.

Each question carries 3 marks.

2. Define:

- (i) Tyndall effect (ii) Valency (iii) Electronegativity

3. Write down three differences between Alkali metals and Alkaline earth metals.

4. What is an aqueous solution? Give an example. Air is a mixture of gases then why Nitrogen gas is considered solvent?

5. What are isotopes? Describe isotopes of Chlorine.

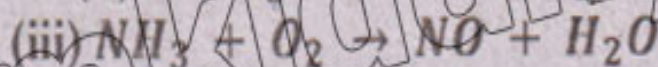
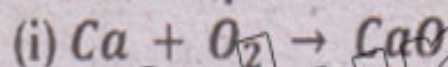
6. Identify group and period in the period table of the following elements: (i) ${}_3\text{Li}$ (ii) ${}_6\text{C}$ (iii) ${}_{13}\text{Al}$

7. Write down any three points of atomic model proposed by Schrodinger.

8. What is the mass of Oxalic acid ($\text{C}_2\text{H}_2\text{O}_4$) required to prepare 100cm^3 volume of 2M Oxalic acid solution?

(where Atomic masses: $\text{C} = 12$, $\text{H} = 1$, $\text{O} = 16$)

9. Balance the following chemical equations:



10. State Faraday's I, law of electrolysis and explain it

11. 60ml sample of a gas is heated from 27°C to 52°C , at constant pressure. What will be final volume of this gas?

12. Write down the chemical formulae of given compounds:

- (i) Lime stone (ii) Washing soda (iii) Sugar

13. Give reason:

(i) Why gasoline does not dissolve in water?

(ii) Alkali metals are not found in Free State in nature, why?

Section C (Detailed –Answer Question) (12)

NOTE: Attempt any TWO (2) questions from this section.

Each question carries 6 marks.

14. Define Chemistry, and list any five branches of it and explain them.

15. Define ionic bond. Illustrate the bond formation in Sodium Chloride (NaCl) also write any two characteristics of ionic compounds. OR Describe discharge tube experiment with labelled diagram and state what were the justification and conclusion of J.J. Thomson in this respect

16. What is electroplating? How can a steel spoon be electroplated with chromium explain with electrodes reaction also draw a labelled diagram of electrolytic cell.