

Roll No.(in Figures): (in Words):

Maximum Marks: 48

(SUBJECTIVE TYPE)

Time Allowed :1.45 Hours

PART - I

Q2. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) Give the scope of biochemistry.
- (ii) Define empirical formula with an example.
- (iii) Give four characteristics of cathode rays.
- (iv) For what purpose U-235 is used?
- (v) Give two properties of positive rays.
- (vi) Give the trend of ionization energy in a period.
- (vii) State Mendeleev's periodic law.
- (viii) Define effective nuclear charge.

Q3. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) Why has water polar covalent bond?
- (ii) What is a triple covalent bond? Give an example.
- (iii) What is Epoxy? Also write its use.
- (iv) Why the ionic compounds have high melting and boiling points?
- (v) Why the rate of diffusion of gases is rapid than that of liquids?
- (vi) What do you mean by pascal? How many Pascals are equal to 1 atm.
- (vii) Convert - 30°C to Kelvin.
- (viii) Why drops of rain fall downward in the air?

Q4. Write short answers to any FIVE (5) questions: (5×2=10)

- (i) What is the difference between solution and aqueous solution?
- (ii) What is tyndall effect?
- (iii) Define oxidizing agent and give example.
- (iv) Define electrochemical cell and give its types.
- (v) What is corrosion? Give example.
- (vi) What is the trend of electropositivity in a period?
- (vii) Write down two uses of magnesium.
- (viii) Why Nitrogen is necessary for safety of life on earth?

PART - II

Note: Attempt any TWO questions. (9×2=18)

- Q5. (a) How chemical formula is written? 5
- (b) Write four properties of canal rays. 4
- Q6. (a) State the covalent bond? Explain types of covalent bond by giving one example for each 5
- (b) Describe factors on which diffusion of liquid depends. 4
- Q7. (a) Give five characteristics of suspension. 5
- (b) Describe any four rules for assigning oxidation state. 4