Bahawalpur Board 2018 (First Group)

Roll No.(in Figures): ----(in Words): -----SUBJECTIVE TYPE Time Allowed: 1.45 Hours (PART - I) Write short answers to any FIVE (5) questions: $(5 \times 2 = 10)$ Q2. Write two application of nuclear chemistry. (i) Define molecular formula and give one example. (ii) What is the difference between atom and ion? How U-235 is used for power generation? What are the defects of Rutherford's atomic model? Why the ionization energy increases in period? (vii) Why the elements are called 'S' and 'P' block elements? (viii) What are the contributions of Moseley in periodic table? Write short answers to any FIVE (5) questions: 03. $(5 \times 2 = 10)$ How an atom can accommodate 08 electrons in its valence shell. Write two ways. (i) What are inter molecular forces? (ii) Define malleable and ductile property of metals. What is standard atmospheric pressure? Why densities of gases are low as compared to liquids? (v) Define unsaturated solution. (vii) Explain (% m/v) mass/volume solution with one example. (viii) What is Tyndall effect? Write short answers to any FIVE (5) questions: $(5 \times 2 = 10)$ Define reducing agent and also give an example. (i) (ii) Why is steel plated with nickel before the electroplating of chromium? (iii) How can you prove with an example that conversion of atom to an ion is a reduction reaction? (iv) Calculate the oxidation number of sulphur in H_2SO_4 . As O_1N_1 of $H=\pm 1$ and O_1N_2 of O=-2(v) Write the names of any two moderately reactive metals. (vi) How oxygen react with magnesium? (vii) State two uses of sodium. (viii) Why is sodium metal more reactive than magnesium metal? (PART - II) Note: Attempt any TWO questions. $(2 \times 9 = 18)$ State postulates of Bohr's atomic theory. Q5. (a) State any four types of molecules. (b) Q6. (a) Define hydrogen bounding. Explain that how these forces affects the physical properties of compound?

What is evaporation? Discuss the factors affecting evaporation.

Describe the electroplating of chromium in detail.

Write down any four characteristics of solution.

(b)

(a)

(b)

Q7.