D.G.K Board 2017 (First Group)

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) Define physical properties also give two examples.

(ii) Differentiate between atom and Ion.

(iii) Write down any two properties of neutron.

(iv) State two observations in Rutherford's model.

(v) Write down the electronic configuration of Magnesium.

(vi) State the law of Octaves.

(vii) Differentiate between period and Group.

(viii) State the periodic law.

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

(i) What type of covalent bond is formed in CH_4?

(ii) Why does ice float on water?

(iii) Give two characteristics of Ionic compounds.

(iv) Define co-ordinate covalent bond with one example.

(v) Define diffusion with an example.

(vi) Define Allotropy with an example.

(vii) Why liquids are mobile?

(viii) How meat is preserved?

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

(i) What do you mean by (Volume/Volume) V/V %.

(ii) What type of solution butter and smoke are?

(iii) Define oxidation and reduction in the term of loss or gain of electron.

(iv) What is the difference between anode and cathode?

(v) Calculate the oxidatin number of sulpher in $CaSO_4$.

(vi) What is the relationship between electropositivity and ionization energy?

(vii) In what conditions H_2 react with I_2 ? Give equation of the reaction.

(viii) Write any two uses of silver.

PART - II

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

Q5. (a) What is chemistry? Describe any four branches of chemistry. 5

(b) Describe Rutherford's Experiment with the help of diagram. 4

Q6. (a) What is co-ordinate covalent bond. Explain with equation the formations of amonium radicals $[NH_4^+]$ and $[NH_3BF_3]$ 5

(b) Explain the Amorphous and crystalline solids. Give at least two examples for each. 4

Q7. (a) Give the five characteristics of colloid. 5

(b) Discuss the electrolysis of water. 4