14CHU04

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION DECEMBER 2018
(Second Semester)

Branch - **CHEMISTRY**

GENERAL CHEMISTRY - II

Time : Three Hours Maximum : 75 Marks

SECTION-A *(20* Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 x 2 = 20)

1 Give the anomalous behaviour of Be.
2 Why are noble gases called inert?
3 Define intensive property with an example.
4 What are the path functions? Give an example.
5 Define Unit cell.
6 Sketch CsCl crystal lattice.
7 What is anti-Markownikoff s rule?
8 Why are alkynes acidic? Give an example.
9 Draw the resonance structures of benzene.
10 Write the Friedel-crafts reaction.

SECTION - B (25 Marks)

Answer **ALL** Questions
ALL Questions Carry **EQUAL** Marks (5 x 5 = 25)

11 a Explain the position of noble gases in periodic table.

OR

b Give the diagonal relation between Li and Mg.

12 a State and explain Hess's law of heat summation.

OR

b Derive the relation between Cp and Cv.

13 a Distinguish between amorphous and crystalline solids.

OR

b Derive the Bragg's equation.

14 a What is the mechanism of ozonolysis reaction? Give an example and its uses.

OR

b State and explain Diels-Alder reactions.

15 a What are activating and deactivating substituents? Give examples.

OR

b Define and explain Huckel's rule.

SECTION - C (30 Marks)

Answer any **THREE** Questions
ALL Questions Carry **EQUAL** Marks (3 x 10 = 30)

16 Describe the ores and extraction of Beryllium.

17 Explain the following
a) Kirchoff s equation (5)
b) Enthalpy of neutralization (5)

18 ' Sketch and explain the various symmetry elements in crystals.

19 State and explain
a) Saytzeff and Hofmann rule (5)
b) Nucleophilic addition reactions (5)