

UG – 354

BCHE-22

**B.Sc. DEGREE EXAMINATION —
DECEMBER, 2019.**

Second Year

Chemistry

GENERAL CHEMISTRY – IV

Time : 3 hours

Maximum marks : 75

PART A — ($3 \times 5 = 15$ marks)

Answer any THREE questions

1. What are the difference between
 - (a) Calcination and roasting
 - (b) Ore and minerals
2. Explain green chemical synthesis of paracetamol.
3.
 - (a) What is pseudohalogens? Give two example.
 - (b) Give two difference between halogen and pseudohalogen.

4. List any five alloys with composition and their uses.
5. What are carbohydrates? How they are classified?

PART B — ($4 \times 15 = 60$ marks)

Answer any FOUR questions.

6. Explain the following terms with examples
 - (a) Ion exchange technique for purification of metals
 - (b) Froth floatation process
 - (c) Zone refining
7.
 - (a) Give twelve principle of green chemistry. (10)
 - (b) Discuss: Microwave assisted green synthesis. (5)
8.
 - (a) List the anomalous behavior of oxygen. (5)
 - (b) Predict the structure and shape of XeF_2 , XeF_4 , XeF_6 , XeOF_2 and XeOF_4 . (10)

9. (a) Compare lanthanide and actinide elements. (5)
- (b) Discuss the metallurgy of uranium. (10)
10. (a) What are hormones? Describe male and female sex hormone. (10)
- (b) What are the symptoms of the diseases caused by the deficiency of vitamin A? (5)
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