

**UG-350**

**BCHE-11**

**B.Sc. DEGREE EXAMINATION –  
JUNE, 2019.**

**First Year**

**Chemistry**

**GENERAL CHEMISTRY — I**

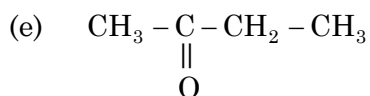
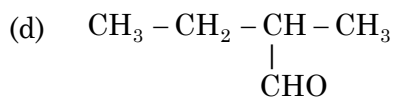
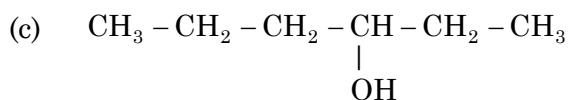
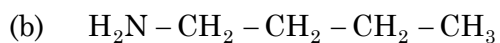
Time : 3 hours

Maximum marks : 75

**PART A — (3 × 5 = 15 marks)**

Answer any **THREE** questions.

1. Give IUPAC name for the following organic compounds.



2. (a) Write the structure of the following compounds :
- (i) 3-aminopropan-1-ol
  - (ii) 2-methylpyridine
- (b) Write short notes on inductive effect.
3. How the elements are classified based on the electronic configuration?
4. Explain hydrogen bonding with suitable examples.
5. Write short notes on viscosity and surface tension.

PART B — (4 × 15 = 60 marks)

Answer any FOUR questions.

6. (a) How the organic compounds are classified based on the C and H atoms?
- (b) State and explain the IUPAC rules for naming aliphatic compound containing alcohols and amines.
7. Write short notes on the followings :
- (a) resonance effect
  - (b) hyperconjugation
  - (c) steric effect.

8. Give an account for the followings :
- (a) Atomic radii
  - (b) Ionic radii
  - (c) Bond length.
9. (a) Write the properties of ionic compounds.  
(b) Explain octet rule with suitable examples.
10. Write a short note on Liquid crystals and its applications.
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