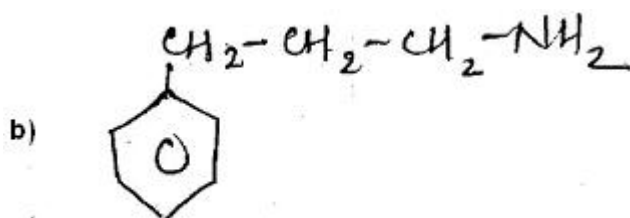
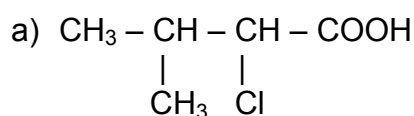


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**FACULTY****Pharm D (6 – YDC) I – Year (Main) Examination, July 2017****Subject: Pharmaceutical Organic Chemistry****Time: 3 Hours****Max.Marks: 70****Note: Answer all questions from Part – A. Any Five questions from Part – B.****PART – A (10x2 = 20 Marks)**

1 Write IUPAC names of the following:



- 2 Explain different types of intermolecular forces.
- 3 Write any one preparation methods of cyclopentane.
- 4 Explain the stability of carbocations.
- 5 Write a note on hyper conjugation.
- 6 Write the uses of citric acid and saccharin sodium.
- 7 Why is acetylene acidic in nature?
- 8 Define electrophiles and nucleophiles and give examples.
- 9 What is optical isomerism?
- 10 What is resonance? Give examples.

**PART – B (5x10 = 50 Marks)**

- 11 a) Explain the reaction and mechanism of Markownikoffi addition of alkene. 5  
b) Explain Bayer's strain theory and give its limitations. 5
- 12 Explain the mechanism and stereochemistry of  $\text{SN}_1$  and  $\text{SN}_2$  reactions with examples. 10
- 13 a) Discuss the effect of halogen on electrophilic aromatic substitution of alkyl benzene. 5  
b) Write the reaction and mechanism of Aldol condensation. 5

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- 14 Explain the mechanism of  $E_1$  and  $E_2$  reactions with examples. 10
- 15 Write the preparation, assay and uses of following:
- a) Aspirin 3
  - b) Urea 3
  - c) Tartaric acid 4
- 16 Explain the reaction and mechanism of:
- a) Reformat sky reaction
  - b) Fries Rearrangement
- 17 Discuss the electrophilic substitution reactions of benzene with examples. 10
- 18 Write notes on:
- a) Polarity of molecules 3
  - b) Geometrical isomerism 3
  - c) Acidity of phenol 4

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