

SUBJECT : PHARMACEUTICAL CHEMISTRY – II (ORGANIC)

Day : Wednesday
Date : 14/11/2018

Time : 10.00 A.M. TO 01.00 P.M.
Max. Marks : 60

W-2018-4062

N.B.:

- 1) Q. No.1 and Q.No.5 are **COMPULSORY**. Out of the remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

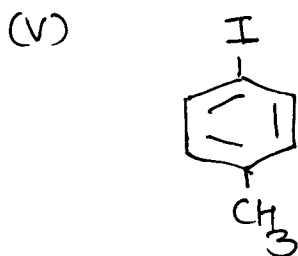
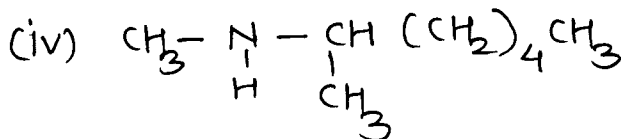
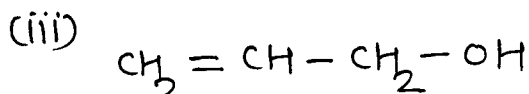
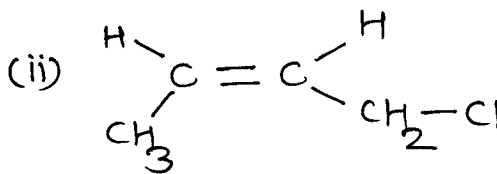
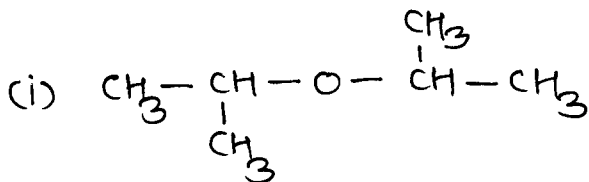
Q.1 Answer **any FIVE** of the following. (10)

- a. What is Bond Dissociation Energy?
- b. Give ideal properties of water as a solvent.
- c. What is Sacrificial Hyperconjugation?
- d. Give resonating structures of Carbonate ions.
- e. What are Intramolecular forces of attraction?
- f. Define Dipole moment (μ). How it is calculated?
- g. Define Boiling Point.

Q.2 What is Inductive effect? How it is measured? Give its application. (10)

Q.3 a. Give Lewis dash-dot method of writing resonance. (05)

b. Give IUPAC names of the following compounds. (**any FIVE**) (05)



Q.4 Write short notes on (**any TWO**) (10)

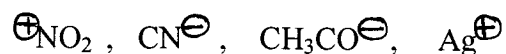
- a. S_N1 Reaction
- b. Steric effects
- c. Hybridization
- d. Melting Point

P.T.O.

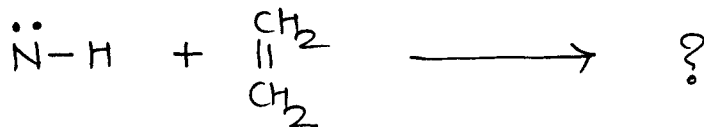
SECTION – II

Q.5 Answer **any FIVE** of the following. **(10)**

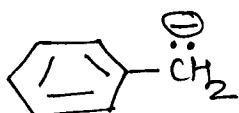
a. Differentiate following reagents into Electrophiles and Nucleophiles.



b. Predict the product.



c. Give resonance involved in following Carbanion.



d. Give physical properties of π -complexes.

e. Give two reactions of σ -complexes.

f. What is Carbanion displacement reaction?

g. Give two differences between σ -complexes and π -complexes.

Q.6 Define and classify Isomerism. Explain Stereoisomerism in detail. **(10)**

Q.7 a. Explain Halogenation reactions with examples. **(05)**

b. Give method of preparation and reactions of Carbenes. **(05)**

Q.8 Write short notes on (**any TWO**) **(10)**

a. Carbon radicals

b. Sulphonation reactions

c. Tautomerism

d. Benzyne

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