

M.Pharm. F.Y. (Pharmaceutical Chemistry) (CBCS Pattern) Sem-I
MPC102T - Advanced Organic Chemistry I

P. Pages : 1

Time : Three Hours



GUG/W/22/14163

Max. Marks : 75

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- Notes :
1. Illustrate your answers wherever necessary with the help of neat sketches.
 2. All questions are compulsory.
 3. Diagrams and chemical equation should be given wherever necessary.

- 1. Elaborate on :** **2x20**
=40
1. a) Distinguish the features of E1 and E2 elimination reactions.
b) Explain the techniques for the preparation of chiral drugs.
 2. Discuss in detail about the following synthetic methodologies for obtaining drugs
a) Selective functional group Inter-conversions.
b) Disconnection approach.
c) Retro-synthetic analysis.
 3. a) Discuss on Nano-chemistry with special reference to its application in drug discovery.
b) Write a detailed note on aliphatic nucleophilic substitution.
- 2. Discuss on :** **1x15**
=15
1. a) Neighboring group effect with suitable examples.
b) Delocalized chemical bonding.
 2. a) Ozonolysis and its synthetic importance.
b) Basic theory of photo chemical reactions with its application.
- 3. Write notes on :** **4x5**
=20
- 1) Importance of Michael reaction.
 - 2) Different types of peri-cyclic reactions with examples.
 - 3) Hoffman rearrangement.
 - 4) Importance of stereo selective synthesis.
 - 5) Nucleophilic substitution reactions of pyridine.
 - 6) Phase transfer catalysis in reduction reaction.
