

[Total No. of Questions - 9] [Total No. of Printed Pages - 2]
(2124)

1684

B. Pharmacy 3rd Semester Examination
Pharmaceutical Chemistry/Organic Chemistry (OS)
HBP-203

Time : 3 Hours

Max. Marks : 80

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

- Note :** (i) Answer any five questions, attempting one question from each section A, B, C & D and section E is compulsory.
- (ii) All questions carry equal marks.

SECTION - A

1. Discuss in detail methods of preparation and electrophilic addition reactions of α, β -unsaturated carbonyl compounds with mechanism. (16)
2. Write down in detail about Sigmatropic and Electrocyclic reactions. (16)

SECTION - B

3. (a) Write down in detail about hydrogenation of alkenes by transition metal catalyst. (8)
- (b) Discuss in detail about -anti and -syn addition reactions of stereo-specific reactions. (8)
4. (a) Differentiate between Anchimeric assistance and neighboring group participation. (4)

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- (b) Explain in detail that how neighbouring group participation affects rate of reaction? (12)

SECTION - C

5. Discuss in detail about nucleophilic and electrophilic substitution reactions of imidazole. (16)
6. Describe any two methods of preparation and reactions of pyrazole. (12)

SECTION - D

7. Describe in detail about structure elucidation of sucrose. (16)
8. Write short notes on:
- (a) Saponification value of oil/fat.
 - (b) Ruff Degradation method of carbohydrates.
 - (c) Secondary structure of proteins.
 - (d) Nucleic acid bases. (4×4=16)

SECTION - E

9. Write notes on:
- (a) Diels-Alder Reaction.
 - (b) Polysaccharides.
 - (c) Nucleophilic substitution reactions of pyridine.
 - (d) Cycloaddition Reactions. (4×4=16)
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