

I B. Pharmacy II Semester Supplementary Examinations, March - 2022
PHARMACEUTICAL ORGANIC CHEMISTRY-II

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **THREE** Questions from **Part-B**

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PART -A

1. a) Write in brief on Huckel rule. (4M)
- b) Write reactions to differentiate 1°, 2° and 3° amines. (3M)
- c) Write about acidity of carboxylic acid. (4M)
- d) Write in brief on reactivity of aryl halides. (4M)
- e) Write in brief on benzyne concept. (3M)
- f) Write in brief on Fries rearrangement. (4M)

PART -B

2. a) Write in detail on reactivity of alkyl halides. (8M)
- b) Explain the methods of preparation and reaction of naphthalene. (8M)
3. Write in detail on
  - a) Mannich Reaction. (8M)
  - b) Friedel-Craft's acylation. (8M)
4. a) Discuss the synthetic applications of diazonium salts. (8M)
- b) Write notes on Benzoin condensation. (8M)
5. Write mechanism, reaction conditions and synthetic applications of
  - a) Michael addition. (8M)
  - b) Schmidt reaction. (8M)
6. Write reasons for the following
  - a) Ketones does not respond to Fehlings reagent. (4M)
  - b) Acyl halides are more reactive than carboxylic acids. (4M)
  - c) Cl is better leaving group than -OH group. (4M)
  - d) Trimethylamine is more basic than ammonia. (4M)
7. How can you achieve the following synthetic conversions?
  - a) Benzaldehyde to cinnamic acid. (6M)
  - b) Benzoic acid to benzanilide. (5M)
  - c) Aniline to phenol. (5M)