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School of Basic Sciences
Bachelor of Science Honours in Chemistry
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 50

Sem IV - C1UB404B - Heterocyclic Chemistry

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Explain aromaticity in furan. K2 (2)
- 2) Define the Hoffmann's exhaustive methylation. K1 (3)
- 3) Explain the nitration reaction of aniline with mechanism. K2 (4)
- 4) Explain the Haworth synthesis of Anthracene. K2 (6)
- 5) Illustrate the Mannich reaction with mechanism K3 (6)
- 6) Illustrate the preparation and their synthetic applications of Diazonium Salts. K3 (9)
- 7) Analyze the aromaticity in 5-numbered and 6-membered rings containing one heteroatom. K4 (8)
- 8) Analyze the product form from reduction of nitro benzene in acidic, basic and neutral medium. K4 (12)

OR

- Analyze the distinction between 1°, 2° and 3° amines with Hinsberg reagent. K4 (12)