School of Medical and Allied Sciences
Master of Pharmacy in Pharmaceutics
Mid Term Examination - May 2024

Duration : 90 Minutes
Max Marks : 30

Sem II - MPC201T - Advanced Spectral Analysis

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) Define Homoannular and heteroannular conjugated dienes. K1 (2)

2) Illustrate the λmax of 1-methylcyclohexa-1,3-diene. K2 (2)

3) Interpret types of 2D NMR. K2 (2)

4) Recall the chemical name and structure of one conjugated diene. K1 (2)

5) Extend principle of 2D NMR. K2 (2)

6) Identify characteristics of the peaks in the IR spectrum of 1-butanol. K3 (5)

7) Analyze the interpretation of cyclohexenone (enone) by Woodward Fieser rule. K4 (5)

OR

Analyze the splitting of NMR signals in the spectrum of ethyl bromide. K4 (5)

8) Estimate the characteristics of the peaks in the IR spectra of hydrocarbons. K5 (10)

OR

Estimate the characteristics of the peaks in the IR spectra of benzaldehyde and benzophenone. K5 (10)