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School of Basic Sciences**Master of Science in Chemistry
Mid Term Examination - Mar 2024****Duration : 90 Minutes
Max Marks : 50****Sem IV - MSCH6003 - Chemistry of Natural Products and Retrosynthesis**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 the functions of alkaloids in plants. K2 (2)
- 2) What is the structure of morphine K1 (3)
- 3) Explain the medicinal importance alkaloids. K2 (4)
- 4) Illustrate the exception of isoprene rule. K2 (6)
- 5) Illustrate the soxhlet extraction for isolation of terpenoids. K3 (6)
- 6) Identify the synthetic steps for the formation of thebaine. K3 (9)
- 7) Discuss the biosynthesis of morphine. K4 (8)

- 8) Analyze the stereochemistry involved in quinine. K4 (12)

OR

Analyze the reactions to determine the presence of oxygen containing functional group in terpenoids. K4 (12)