| Roll No. |  |  |  |  |  |  | Total No. of Pages: 0 | 1 |
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Total No. of Questions: 08

## M.Sc. (Ph. Chem) (Sem.-2) CHEMISTRY OF NATURAL PRODUCTS

Subject Code: MSPC-104 M.Code: 20506

Date of Examination: 12-12-22

Time: 3 Hrs. Max. Marks: 80

## **INSTRUCTION TO CANDIDATES:**

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries SIXTEEN marks.
- 1. a) Explain different methods for determination of the ring size of sugars.
  - b) Elaborate on structure elucidation of quinine.
- 2. Discuss the chemical properties, isolation, purification, industrial uses and structural elucidation of menthol.
- 3. Write an elaborative note on terpenoids, with special emphasis on the structural chemistry and properties of citral.
- 4. a) Discuss the classification, chemistry and structure elucidation of anthraquinone glycosides.
  - b) Discuss the structural elucidation of cholesterol.
- 5. Write a note on:
  - a) Flavonoids

- b) Structure elucidation of starch
- 6. a) Explain the structure of disaccharides with special emphasis to sucrose and lactose.
  - b) Define and classify coumarins.
- 7. Write note on the properties and chemistry of:
  - a) Cardiac glycosides

- b) Steroids
- 8. a) What do you understand by the term marker compound? Explain different types of markers and their role in standardization of plant drugs.
  - b) Give structure elucidation and uses of morphine.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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