

M.Sc. Semester - 3 (CBCS) Examination**Oct/Nov-2021 (OLD COURSE)****CHEMISTRY OF NATURAL PRODUCTS (ELECTIVE -1)****Time: 2:30 Hours****Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

Q.1 Answer any **seven** of the following ten questions. [14]

1. Give definition of True alkaloids and Protoalkaloids.
2. Provide the synthesis of Colchicine.
3. Classify vitamin according to their solubility.
4. Explain Isoprene rule.
5. Define the terms steroid and give its skeletal structure.
6. Give any four examples of drug derived from Natural products.
7. Write any four structures of Nucleotides with its names.
8. Show classification of alkaloid based on its nature.
9. Enlist physiology of prostaglandins.
10. Give classification of protein.

Q.2 Answer any **two** of the following three questions. [14]

1. Discuss the synthesis of Vitamin H.
2. Describe the properties and denaturation of Protein.
3. Summarize the chemistry of Reserpine.

Q.3 Answer the following questions. [14]

1. Discuss the nature & structure of nucleus in the Cholesterol.
2. Give the synthesis of Adenine.
3. Elaborate the chemistry of α -pinene.

OR**Q.3** Answer the following questions. [14]

1. Explain the chemistry of Vitamin A1.
2. Give the synthesis of followings.
 - a) Longifolene
 - b) Santonine

Q.4 Answer the following questions. [14]Any **Two** of the following three questions (5 Marks each)

1. Provide the Synthesis of Farnesol.
2. Discuss the synthesis of ACTH.
3. Explain chemistry of Testosterone.

Any **one** of the following two questions (4 Marks)

4. Provide synthesis of Coniine.
5. Explain synthesis of Morphine.

Q.5 Answer any **two** of the following four questions. [14]

1. Give detail classification of Terpenoid with examples.
2. Discuss Chemistry of Zingiberene.
3. Describe occurrence, nomenclature and classification of Prostaglandins.
4. Give the synthesis of Uric acid.
