

M.Sc.(Chem.) Semester - 3 (CBCS) Examination
DEC/JAN. - 2020 [OLD COURSE]
CHEMISTRY OF NATURAL PRODUCTS(ELECTIVE-1)

Time: 1:30 Hours**Marks: 42****Instructions:**

1. Figure to the right indicate marks.
 2. There are five questions in the question paper.
 3. Answer any three of the following questions.
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Q.1 Answer any **seven** of the following ten questions. [14]

1. Give Classification of vitamins.
2. Draw the structure of Diels' hydrocarbon, chrysene, picene and progesterone.
3. Write synthesis of Folic acid.
4. Explain Isoprene rule.
5. How Colchicine can be synthesized?
6. Give any four examples of drug derived from Natural products.
7. Write any four structures of Nucleosides with its names.
8. Give classification of alkaloid based on its nature.
9. What are the characteristic of alkaloids.
10. Enlist physiology of prostaglandins.

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

1. Discuss the properties and denaturation of Protein.
2. Derive the synthesis of Pantothenic acid.
3. Discuss the chemistry of Atropine.

Q.3 Answer the following questions. [14]

1. Establish the nature & structure of nucleus in the Cholesterol. (05)
2. Discuss the chemistry of Vitamin A1. (05)
3. Discuss the chemistry of α -pinene. (04)

OR

Q.3 Answer the following questions. [14]

1. Give the synthesis of Adenine.
2. Give the synthesis of followings.
 - a) Hexosterol
 - b) Santonine

Q.4 Answer the following questions. [14]

(a) Any **Two** of the following three questions (10)

1. Explain chemistry of Testosterone.
2. Give synthesis of Farnesol.
3. Give the evidences for position of double bond in Cholesterol.

(b) Any **one** of the following two questions (04)

4. Provide synthesis of Stilbosterol.
5. Give synthesis of Coniine.

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

1. Discuss the nature and position of side chain in Cholesterol.
2. Describe occurrence, nomenclature and classification of Prostaglandins.
3. Enlist the synthesis of Morphine.
4. Discuss Chemistry of Zingiberene.
