



JBA-003-1103014 Seat No. _____

M. Sc. (Sem. III) (CBCS) Examination

December - 2019

C-OP-304 : Organo-pharmaceutical Chemistry

(Chemistry of Natural Products : ELE-I)

Faculty Code : 003

Subject Code : 1103014

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) All Questions carry equal marks.
(3) Attempt all questions.

1 Answer the following : (Any **Seven**) **14**

- (a) Define the term "Alkaloids" and classify them with suitable example.
- (b) Write the isolation of Nucleic acid.
- (c) Write the classification of protein.
- (d) Give the synthesis of Hexosterol.
- (e) Write the synthesis of Phytyl-ketone.
- (f) Define, Hormones and classify it.
- (g) Write the synthesis of Biotin.
- (h) Draw the isolation chart of Vitamin-A
- (i) Discuss Quaternary structure of Protein.
- (j) Define the term, "Terpenoids" and write their classification.

2 Answer the following : (Any **Two**) **14**

- (a) Discuss the chemistry of Testosterone.
- (b) Discuss the chemistry of α - Pinene.
- (c) Differentiate DNA and RNA.

3 Answer the following : **14**

(a) Write the synthesis of strychnine and Colchicine.

(b) Give the analytical evidences for Vitamin-E.

OR

(a) Discuss the chemistry of Reserpine.

(b) Write the synthesis of Folic acid and Niacin.

4 Answer the following : **14**

(a) Describe the constitution of Nucleosides.

(b) Explain the structure of Protein.

5 Answer any **two** from the followings : **14**

(a) Write the synthesis of Riboflavin and Pyridoxine.

(b) Write the synthesis of sceleium-A₄ and Ascorbic acid.

(c) Write the synthesis of Longifolene and Santonine.

(d) Give a brief account on ACTH.
