

1015

M.Sc. IV Semester Examination 2020

Subject : Chemistry

Paper : III –Chemistry of Natural Products (For Ex.- Paper IV)

Max.Marks : 85

Min.Marks: 29

Note: Attempt all questions.

Section –‘A’
(Short Answer Type Questions)

1. Attempt any five of the following questions. 5x5=25
- (i) Give the classification of Terpenoids.
 - (ii) Synthesis of Menthol.
 - (iii) What is the role of Alkaloids in plants?
 - (iv) Synthesis of Morphine.
 - (v) Isolation of Bile acids.
 - (vi) Write structural formula of Testosterone.
 - (vii) Give the synthesis of Myricetin.
 - (viii) Isolation of Apigenin.
 - (ix) Give the synthesis of Pyrethroids.
 - (x) Synthesis of PGF_{2a}.

Section –‘B’
(Long Answer Question)

Unit - I

2. Explain the classification, structure and synthesis of Citral. 12

OR

Write short note on:

- (i) Farnesol (ii) Zingiberene

Unit - II

3. Describe the classification based on Nitrogen Hetrocyclic ring. 12

Contd...

(2)

OR

Describe the structure, stereochemistry and synthesis of Atropine.

Unit - III

4. What are steroidal sex hormones? Discuss their physiological significance.

Write name and structure of various steroidal sex hormones. 12

OR

Write short notes on:

(i) Biosynthesis of steroids

(ii) Cholestrol

Unit - IV

5. Explain isolation and synthesis of Vitexin and Quercetin 3 Glucoside. 12

OR

Describe structure and synthesis of haemoglobin.

Unit - V

6. describe the structure, synthesis and reaction of Rotenones. 12

OR

Describe classification, biogenesis and physiological effect of PGE₂.
