

Code No: B134103

R13

SET - 1

IV B. Pharmacy I Semester Regular/Supplementary Examinations, Oct/Nov - 2017

CHEMISTRY OF NATURAL PRODUCTS

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answering the question in **Part-A** is Compulsory
3. Answer any **THREE** Questions from **Part-B**

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**PART -A**

1. a) Explain about the chemical properties of D- Glucose. (3M)
- b) Write about denaturation of proteins. (4M)
- c) Describe about nucleoproteins and nucleic acids. (4M)
- d) Write the structures of Citral, Camphor, Carvone and  $\alpha$ -terpeneiol. (4M)
- e) Write about chemical tests for alkaloids. (3M)
- f) Write the physiological role of Ascorbic acid. (4M)

**PART -B**

2. a) Define and classify carbohydrates with suitable examples. (8M)
- b) Explain about pharmaceutical importance of maltose, lactose, starch, cellulose and dextrin. (8M)
3. a) What do you understand by N-terminal and C- terminal amino acids? Discuss the various methods used to determine N- terminal amino acids in a polypeptide chain. (10M)
- b) Define and name the essential amino acids and write the methods of synthesis of amino acids. (6M)
4. a) What are Xanthines? How do they differ from purines? (6M)
- b) Write an account on methylated purines indicating their structural relationship. (10M)
5. a) Explain the chemistry of Citral and Camphor. (6M)
- b) Define and classify the terpenes. Write general methods of synthesis of Camphor and Menthol. (10M)
6. a) Define and classify the alkaloids with their structures and give suitable examples. (10M)
- b) Explain about chemistry and uses of Ephedrine. (6M)
7. a) Classify the vitamins with suitable examples and write the chemistry, physiological role of Thiamine. (10M)
- b) Define Steroids. Write the nomenclature & Skeletal structure of Ergosterol, Stigmasterol, Cholesterol and Diosgenin. (6M)