

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc., Summer-2017-18 Examination

Semester: 4
Subject Code: 11205251
Subject Name: Drugs and Natural Products.

Date: 08/05/2018
Time: 02:00PM TO 04:30PM
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

- Q.1. A) Write Brief Note:** (08)
- (a). Explain the Classification of Natural products. Give their names.
 - (b). Describe structure and synthesis of Vitamin B6-Pyridoxin.
- Q.1. B) Answer the following questions (Any two)**
- (a) Write in short. (04)
 1. Describe the structure and uses of Vitamin B1-Thiamin.
 2. Give the structure and uses of Vitamin C.
 - (b) Describe structure and synthesis of Vitamin H-Biotin. (04)
 - (c) Write a note on the methods to isolate Natural products. (04)
- Q.2. A) Answer the following questions.**
- (a) Write in short. (04)
 1. What are Steroids? How they are different than Drugs?
 2. Define Anti-viral agents. Give two names of it.
 - (b) Describe the mode of action of steroids. (04)
- Q.2. B) Answer the following questions (Any two)**
- (a). Write the synthesis and uses of Testosterone. (03)
 - (b). Write the synthesis and applications of Thymidine. (03)
 - (c). Write the synthesis and applications of Methisazone. (03)
- Q.3. A) Write Brief Note:** (08)
- (a). What are Terpenoids? Describe its classification with examples.
 - (b). Describe the structure and synthesis of Morphine.
- Q.3. B) Answer the following questions (Any two)**
- (a) Write in short. (04)
 1. Write the structure and uses of Camphor.
 2. Write the structure and uses of Reserpine.
 - (b) What are Alkaloids? Write a note on the physiological actions of Alkaloids. (04)
 - (c) Give the structure and Biosynthesis of Ephedrine. (04)
- Q.4. A) Answer the following questions.**
- (a) Write in short. (04)
 1. What are Natural Pigments? Give their names.
 2. What are Anthocyanins? Give their examples.
 - (b) Explain the synthesis of *beta*-Carotene. (04)
- Q.4. B) Answer the following questions (Any two)**
- (a) Describe the synthesis and structure of Chlorophyll. (03)
 - (b) Give the synthesis of Haemin. (03)
 - (c) What are Porphyrins? Give their examples. (03)