

PARUL UNIVERSITY
FACULTY OF APPLIED SCIENCE
M.Sc., Summer 2022-23 Examination

Semester: 4
Subject Code: 11205251
Subject Name: Drugs & Natural Products

Date: 20-03-2023
Time: 2:00pm to 4:30pm
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) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
(a) Synthesis of Testosterone from Cholesterol
(b) Short note on Sex Hormones
- Q.1. B) Answer the following questions (Any two) (04)**
(a) Short note/ Brief note (2x2)/ Schematically label the figures (2x2) (Each of 02 marks) (04)
1. Synthesis of Methisazone
2. Give the full name of AIDS and HIV
(b) Write Structure Elucidation of Progesterone (04)
(c) Write Synthesis of Estradiol (04)
- Q.2. A) Answer the following questions. (04)**
(a) Short note / Brief note (2x2)/ Fill in the blanks. (Each of 02 marks) (04)
1. Explain daily requirement of Vitamin A, B1, B2, B6 & C in mg for Human being.
2. Short note on Vitamin B6
(b). Explain Symptoms, diagnosis & Treatment of HIV (04)
- Q.2. B) Answer the following questions (Any two) (03)**
(a) Short note/ Multiple choice questions. (Each of 01 marks) (03)
1. What is the systematic name for isoprene.
2. What is an oxidised terpene known as?
3. What is the name of Vitamin B2?
(b)) What are Natural products. Describe its classification, source & methods of isolation. (03)
(c) Structure of Camphor & Zingiberene, Squalene & Reserpine, Morphine & Vitamin B6 (03)
- Q.3. A) Essay type/ Brief note (4x2) (Each of 04 marks) (08)**
(a) What are terpenes. Explain their classification & Isoprene rule
(b) Short note on: β -Carotene
- Q.3. B) Answer the following questions (Any two) (04)**
(a) Short note/ Brief note (2x2)/ Schematically label the figures (2x2) (Each of 02 marks) (04)
1. Write the Molecular formula of Tetra Terpene & Polyterpene.
2. Terpene is derived from the word? Explain their uses.
(b) What are Alkaloids. Explain their uses. (04)
(c) Write structure of four Vitamins. (04)
- Q.4. A) Answer the following questions. (04)**
(a) Short note/ Brief note (2x2)/ Fill in the blanks. (Each of 02 marks) (04)
1. What are Amino acid. Explain their classification.
2. What is the source of Vitamin C. Explain its deficiency in Human beings.
(b) Explain Zwitter Ion. (04)
- Q.4. B) Answer the following questions (Any two) (03)**
(a) Short note/ Multiple choice questions. (Each of 01 marks) (03)
1. Name Hormones associated with Puberty ?
2. Morphine an opium alkaloid is used as ?
3. Anti retroviral drugs are used for ?
(b) Write names of two Vitamins, Pigments, Alkaloid & Terpenoids (03)
(c) Short note on Vitamin B Complex. (03)