

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2024
(Sixth Semester)

Branch - BIOTECHNOLOGY

BIOPHARMACEUTICALS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 Which hormone is a major contributor to symptoms of Inflammation?
(i) Histamine (ii) Serotonin
(iii) Leukotriene (iv) Bradykinin
- 2 _____ is defined as the rate and extent of drug absorption.
(i) Drug Elimination (ii) Drug Permenation
(iii) Bioavaliability (iv) Drug Permeability
- 3 Which of the following is not a common route of drug administration?
(i) Dissolution (ii) Intravenous
(iii) Oral (iv) Topical
- 4 A term used to signify a preparation that appears identical to active drug preparation but has no biological activity is _____.
(i) Active ingredient (ii) Placebo
(iii) Active Principle (iv) Gazebo
- 5 The Recombinant product of interferon is _____.
(i) Intron A (ii) Roferon A
(iii) Alferon (iv) All of the above

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a. Enlist the basic principle in Drug Formulation.
OR
b. Enlist the Routes of Drug Administration.
- 7 a. Enlist the various components of Pharmacodynamics and their function.
OR
b. Enlist the various components of Pharmacokinetics and their function.
- 8 a. What is Pharmaco-vigilance and how it is done?
OR
b. State different methods used for identification of Bioactive Constituents.
- 9 a. What is Curcumin, state its natural source and how is it important as a drug component?
OR
b. What is Vincristine, state its natural source and how is it important as a drug component?
- 10 a. Write a short note on Importance of Oils in Aroma therapy.
OR
b. Enlist the Biopharmaceuticals from Traditional Medicine.

SECTION -C (30 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a. Discuss about the Indian System of Medicine.
OR
b. Discuss about the Classification of Drugs based on ATC System.
- 12 a. Explain the different Detoxification enzymes in Liver.
OR
b. Explain the mechanism of Biotransformation of drugs.
- 13 a. Describe the Critical elements in Clinical Research.
OR
b. Describe about the Drug Development Cycle.
- 14 a. Describe the Drug Manufacturing process for the production of Biopharmaceutical ingredients.
OR
b. What is Good Manufacturing practice? Mention its key components.
- 15 a. Describe the production of Interferons and Cytokines.
OR
b. Discuss the importance of Biopharmaceuticals in Medicine.

Z-Z-Z

END