

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2024  
(Fourth Semester)

Branch – **BIOCHEMISTRY**

**MAJOR ELECTIVE COURSE – II BIOCHEMISTRY OF DRUGS**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

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

1. A chemical compound that affects human metabolism and provides cure from diseases is called \_\_\_\_\_  
(i) poison (ii) medicine (iii) enzyme (iv) hormone
2. The first step in the drug discovery process is  
(i) Lead Modification (ii) Lead Identification  
(iii) Lead Validation (iv) Lead Optimization
3. The safety of the candidate drug in humans are studied in  
(i) Phase I (ii) Phase II (iii) Phase III (iv) Phase IV
4. Which of the following drug is an example of polyenes ?  
(i) Amphotericin B (ii) Griseofulvin  
(iii) Fluconazole (iv) Miconazole
5. Patients with penicillin allergies are frequently allergic to another class of antibiotics. Which one?  
(i) Cephalosporins (ii) Macrolides  
(iii) Aminoglycosides (iv) Fluoroquinolones

**SECTION - B (15 Marks)**

Answer ALL Questions

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

6. a Discuss about the drug receptor interactions.  
OR  
b Explain about the drug absorption.
7. a Illustrate the computer assisted drug design.  
OR  
b Classify the method of drug design.
8. a Discuss about the factors affecting drug metabolism.  
OR  
b Analyze the species difference in drug metabolism.
9. a Determine the cancer chemotherapy.  
OR  
b Explain the mode of action of Sulphonamides.
10. a Discuss about adverse reactions of drugs.  
OR  
b Evaluate the drug intolerance.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

11. a Classify the routes of drug administration.  
OR  
b Discuss about drug receptor interaction and binding forces.
12. a Analyze patent and Intellectual Property Rights drug design.  
OR  
b Compare the Structure based drug design and Denovo drug design.
13. a Differentiate the Phase I and Phase II drug metabolism.  
OR  
b Analyze the Role and mechanism of action of cytochrome P450.
14. a Determine the Metabolic antagonism by enzyme inhibition.  
OR  
b Formulate the antifungal and antimalarial agents.
15. a Analyze the role of pharmacovigilance in ADR monitoring.  
OR  
b Determine the treatment of acute drug poisoning.

Z-Z-Z

END