

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2023  
(Fourth Semester)

Branch – BIOCHEMISTRY

**DISCIPLINE SPECIFIC ELECTIVE – 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 Routes of administration other than ----- are called parenteral.  
(i) intra dermal (ii) intra venal  
(iii) intra muscular (iv) alimentary tract
- 2 Ligand based drug design method developed more than 50yrs ago by \_\_\_\_\_ &  
(i) Chirico & Gramatica (ii) Hansch & Fijita  
(iii) Leonard & Roy (iv) Gramatica & Gombar
- 3 Adrenaline, 5-HT and tryptamine like substances are catalyzed in oxidative deamination type of reaction occurs at  
(i) cytoplasm (ii) Microsomal  
(iii) Mitochondria (iv) non-microsomal
- 4 Biological activity of a drug can be reduced or abolished by a chemical reaction with another agent is called  
(i) competitive antagonism (ii) irreversible antagonism  
(iii) chemical antagonism (iv) physiological antagonism
- 5 Following drugs are NSAID except  
(i) Naproxen (ii) Diclofenac  
(iii) Ibuprofen (iv) Aspirin

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

(5 x 3 = 15)

- 6 a) Write about types of diffusion and transporters involved in drug absorption.  
OR  
b) Write about the drug binding protein acceptors.
- 7 a) Write about anti-retroviral drug reaction. Mention three drug names.  
OR  
b) Brief on combinatorial chemistry with drug design.
- 8 a) Explain the pathway of drug metabolism in microsomes of liver.  
OR  
b) Explain reaction steps involved in Phase I drug metabolic reaction.
- 9 a) Write a brief note on sulphonamides.  
OR  
b) Explain the mode of action antifungal agent. Site example.
- 10 a) Write a brief note on drug intolerance.  
OR  
b) Why does drug induce allergic reaction? Explain with reaction.

Cont...

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a) Explain with examples drug agonist reaction.  
OR  
b) Explain types of drug receptors and drug interactions.
- 12 a) Narrate types of quality of QSAR models.  
OR  
b) Explain Intellectual Properties of Rights.
- 13 a) Write short note on the following:  
i) Non-microsomal drug metabolic reaction and  
ii) Induction of drug metabolizing enzymes  
OR  
b) Narrate PHASE II drug metabolic pathway.
- 14 a) Narrate in detail demerits and merits of cancer chemotherapy.  
OR  
b) Write a brief note on the following antimetabolites  
i) Folate ii) Pyrimidines
- 15 a) Explain in detail adverse drug reactions.  
OR  
b) Define drug intolerance. Write about types of drug intolerance.

Z-Z-Z

END