

Reg. No

Name

22P327 - S

M. Sc DEGREE END SEMESTER EXAMINATION - OCTOBER 2022

SEMESTER 3 : PHARMACEUTICAL CHEMISTRY

COURSE : 16P3CPHT09 : PHARMACEUTICAL CHEMISTRY - I

(For Supplementary - 2016/2017/2018/2019/2020 Admissions)

Time : Three Hours

Max. Marks: 75

PART A

Answer any 10 (2 marks each)

1. What do you mean by drug absorption?
2. What do you mean by drug smuggling?
3. Explain the following terms
a) Therapeutic index b) margin of safety of drugs
4. How does aspirin biotransform in our body?
5. Discuss the pharmacological action of dipyridamol.
6. Give the synthesis of methyl dopa.
7. Write the mode of action of Betalactamase-inhibitors
8. Which Pencillin is active against Pseudomonas aeruginosa ? Explain its clinical use ?
9. Give the synthesis of ketoprofen.
10. Give the structure of phenacetin and ibuprofen.
11. Discuss the pharmacological action of ketoprofen.
12. Explain the antihelmintics activity of Albendazole.
13. Explain the mode of action of Clotrimazole.

(2 x 10 = 20)

PART B

Answer any 5 (5 marks each)

14. What are structurally specific and non-specific drugs? Give examples.
15. Explain methylation and sulphonation conjugation in phase II metabolism
16. Write briefly on Phase-I metabolism
17. Outline the synthesis of verapamil? What is its mechanism of action?
18. Write the mode of action, SAR, synthesis, and metabolism of any one of the amino quinoline derivatives in malaria treatment.
19. Explain in detail the SAR of anthranilic acid derivatives as Antipyretics and NSAIDs
20. Discuss in detail COX I and COX II inhibitors.
21. Outline the synthesis of 5 – Fluorocytosine. Explain its mode of action.

(5 x 5 = 25)

PART C

Answer any 2 (15 marks each)

22. What do you mean by excretion of a drug? Discuss about different routes of drug excretion
23. What are antilipidemic agents. Discuss the mechanism of action and SAR of any two types of antilipidemic agents. Give the synthesis of any one antilipidemic agent.
24. What are aminoglycoside antibiotics? Describe the medicinal chemistry of any three potent drugs of this category.
25. Write a note on various sulphonamide drugs. Explain their mode of action and therapeutic uses with suitable example. Outline the synthesis of sulphathiazole.

(15 x 2 = 30)