

Time: 3 Hours

[Max. marks : 70]

Medicinal Chemistry II

QP Code: 2619

Your answers should be specific to the questions asked.

Draw neat labeled diagrams wherever necessary.

LONG ESSAY (Answer any two)**2 X 10 = 20 Marks**

1. Classify diuretics with suitable examples. Add a note on loop diuretics and outline the synthesis of Benzthiazide and Furosemide.
2. What are antineoplastic agents? Discuss the mechanism of action of alkylating agents and antimetabolites. Outline the synthesis of cyclophosphamide and lomustine
3. What are beta lactum antibiotics? Give the degradation products of penicillin. Outline the Chemistry & synthesis of Chloramphenicol.

SHORT ESSAY (Answer any six)**6 X 5 = 30 Marks**

4. Write a note on betalactamase inhibitors.
5. Write the structure of any three sulfonylureas and mention their specific uses. Give the synthesis of chlorpropamide.
6. Discuss the SAR of tetracyclines.
7. Write a note on antitubercular antibiotics.
8. Write a note on prodrug concept and combinatorial chemistry in drug discovery.
9. Name any four anthelmintic drugs. Outline the synthesis of Thiabendazole.
10. Explain with suitable examples a) Cationic surfactants as antiinfectives and b) Dyes used as local antiinfective agents
11. What are sulphonamides? Explain the SAR among antibacterial sulphonamides.

SHORT ANSWERS**10 X 2 = 20 Marks**

12. Outline the synthesis of Nitrofurantoin.
13. Write briefly on anti anginal drugs.
14. Write the structure of any two anti hyperlipidemic agents
15. Outline the synthesis of pyrimethamine.
16. Name any two antithyroid drugs and give their structures.
17. Name any two polypeptide antibiotics and give their uses.
18. Give the chemical structure and uses of any one plant product in cancer therapy.
19. What are ACE inhibitors? Give two examples with structure.
20. Explain the synergistic action of sulphamethoxazole and trimethoprim.
21. Write the structure and uses of furazolidone.

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