

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**



**B.Sc. DEGREE EXAMINATION – CHEMISTRY**

**FIFTH SEMESTER – NOVEMBER 2019**

**16/17UCH5ES02 – MEDICINAL AND PHARMACEUTICAL CHEMISTRY**

Date: 06-11-2019

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

**Part-A**

*Answer ALL questions.*

**(10 × 2= 20)**

1. Mention the treatment for acid poisoning.
2. What is coagulation of blood?
3. Define the term “pharmacognosy”.
4. What is atherosclerosis?
5. What are nutraceuticals?
6. Define the term drug latentiation.
7. What are the steric parameters that influence drug action?
8. Draw the molecular structure of tetra hydro cannabinols.
9. Write an example for the discovery of lead molecule.
10. State the principle of molecular docking.

**Part-B**

*Answer any EIGHT questions.*

**(8 × 5= 40)**

11. Write the characteristics of an ideal disinfectant.
12. What are lipoproteins? Mention their types and roles.
13. Mention the physiological effects of different functional groups in drugs.
14. Describe briefly the screening and toxicity of the drugs.
15. Explain in detail about the long acting barbiturates with two examples.
16. List the qualities of an antibiotic.
17. Describe the extraction of active principles from natural medicinal plants with an example.
18. Discuss the structure and therapeutic uses of taxanes
19. Explain the stereochemical aspects of drugs.
20. Describe the site directed drug delivery with an example of quaternary ammonium carrier.
21. Discuss the drug delivery action of acyclovir.
22. Explain the functions of the different computer programs used for molecular modeling.

**Part-C**

**Answer any FOUR questions.**

**(4 × 10= 40)**

- 23a. What is anemia? Explain its types.
- b. How is the urine sugar determined by Benedict's method? (5+5)
- 24a. Discuss the biological and chemical assays.
- b. Describe salicylic acid and *para* aminophenol derivatives as potent antipyretic analgesics. (4+6)
- 25a. Explain anti anginal agents and calcium channel blockers with an example.
- b. Draw the structure of Tetracycline and mention its uses. (7+3)
- 26a. Explain the structural modification of a medicinal compound with a suitable example.
- b. Discuss the structure activity relationship and drug action of penicillin. (5+5)
- 27a. Explain the structure and action of chloramphenicol.
- b. Describe the structure and medicinal chemistry of streptomycin. (5+5)
28. Explain the factors governing the ability of drugs to reach active site.

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