



QP CODE: 21000567



Reg No :

Name :

M Sc DEGREE (CSS) EXAMINATION, MARCH 2021

Third Semester

Faculty of Science

M Sc PHARMACEUTICAL CHEMISTRY

CORE - CH040303 - DRUG DESIGN AND PHARMACOLOGY

2019 Admission Onwards

72E5C60E

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Explain induced fit receptor theory .
2. Which are the various sources of lead compounds?
3. How will you find the bioactive conformation of a molecule using molecular modelling?
4. Discuss 2D-QSAR technique.
5. Distinguish between agonist and antagonist.
6. What is DMARDs and give one example of gold containing DMARDs?
7. How does thalassemia differ from anemia and suggest a method for the treatment of thalassemia?
8. What is Radiopharmaceutical ?
9. What are intravenous anaesthetics?
10. Differentiate between generalized and partial seizures.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.





11. Write a note on the lipid solubility and biological activity of drugs.
12. Write notes on basic concepts of CADD.
13. What are the softwares used for molecular docking? What are its advantages and disadvantages?
14. What is Hansch analysis? How is it useful in the design of drugs?
15. Discuss about the Contrast Agents for Magnetic Resonance Imaging ?
16. Discuss various agents used for the management of Parkinsonism.
17. Write down the synthesis of buspirone.
18. Give the structures of (1) Indomethacin (2) Paracetamol (3) Flubiprofen (4) Diclofenac

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. a) What is combinatorial synthesis? Explain using a suitable example. b) Explain the term retrosynthetic analysis using a suitable example.
20. Write briefly on a) Absorption of drugs b) Mechanism of action of drugs c) Drug dosage and methods of administration
21. Explain the mechanism of action of librium and baclofen as centrally acting muscle relaxants.
22. Discuss the following antipyretic analgesic compounds with synthesis of any one from each (i) Anthranilic acid derivatives (ii)p-aminophenol derivatives iii) Propionic acid derivatives

(2×5=10 weightage)

