

Rajiv Gandhi University of Health Sciences, Karnataka

III Year B. Pharm Degree Examination – 04-Jan-2020

Time: Three Hours

Max. Marks: 80 Marks

MEDICINAL CHEMISTRY - I (Revised Scheme - 2)

Q.P. CODE: 1961

Your answers should be specific to the questions asked

Draw neat, labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. What are the general pathways of drug metabolism and write the role of cytochrome P-450 in oxidative biotransformation.
2. Outline the biosynthesis and metabolism of Acetylcholine. Explain the SAR of cholinergic agents.
3. What are antihistamines? Classify them with example. Discuss the SAR of H₁ antagonists.

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Write the SAR of barbiturates.
5. Write the function, biosynthesis of adrenergic neurotransmitter.
6. Write the role of solubility and protein binding in biological activity.
7. Discuss the Eicosanoids biosynthesis.
8. Write the mechanism of action of local anaesthetics. Write the synthesis of benzocaine.
9. Classify general anaesthetics with example. Add a note on Dissociative Anaesthetics.
10. Classify NSAIDs with example. Write the synthesis of Mefenamic acid.
11. Classify sympathomimetic agents. Give one example for each class.
12. Explain how partition coefficient and hydrogen bonding influences biological activity.
13. Write the synthesis and uses of acetaminophen and physostigmine.

SHORT ANSWERS

10 x 2 = 20 Marks

14. Write the synthesis of Methsuximide.
15. Write the synthesis of Diphenhydramine hydrochloride.
16. What are anxiolytics? Give examples.
17. Write the synthesis and uses of Glutethimide.
18. Write the synthesis of Meclizine.
19. Give the structure and name of drugs used in spasticity.
20. Write the structure and use of Primidone.
21. Write drugs used as Skeletal muscle relaxants.
22. Write the structure and use of morphine.
23. Sites of drug biotransformation
