

# Rajiv Gandhi University of Health Sciences, Karnataka

## Fourth Semester B. Pharm Degree Examination – 16-Dec-2020

**Time: Three Hours**

**Max. Marks: 75 Marks**

### **Medicinal Chemistry - I**

**Q.P. CODE: 5014**

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. Classify adrenergic antagonists with suitable example from each class along with structure and specific uses. Write the synthesis of Tolazoline.
2. Write the SAR of benzodiazepines. Outline the synthesis of diazepam.
3. Classify NSAIDS with suitable example from each class. Write the synthesis of Ibuprofen.

#### **SHORT ESSAYS (Answer any Seven)**

**7 x 5 = 35 Marks**

4. What is phase II biotransformation? Discuss any two conjugation reactions.
5. Explain the role of hydrogen bonding and partition coefficient in drug action.
6. Discuss hepatic and extra-hepatic metabolism.
7. Write a note on alpha adrenergic antagonists and structure and use of any one.
8. Explain the catabolism of acetyl choline. Write the structure and uses of pilocarpine.
9. Discuss SAR of parasympathomimetic agents.
10. Write the synthesis of procyclidine hydrochloride. Discuss its mechanism of action, uses and possible side effects.
11. Classify barbiturates based on duration of action with suitable examples. Write the synthesis of barbital.
12. What are Narcotic antagonists? Write the structure, uses and demerits of any two narcotic antagonists.

#### **SHORT ANSWERS (Answer All)**

**10 x 2 = 20 Marks**

13. Write the diagrammatic representation of Cytochrome – P 450.
14. Importance of solubility in drug action
15. Write any two drug structures for asthma.
16. What is catecholamine? Mention any two important neurotransmitter catecholamines.
17. Write the structure and specific uses of Prazosin and Carvedilol.
18. Write the structure and uses of Malathion.
19. Write a note on Cholinesterase reactivator.
20. Write the structure and uses of Atropine sulphate.
21. Write the structure and uses Beta amino ketones as CNS depressants.
22. Write any one drug structure of antitussive narcotic drug.

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