

# 2012 scheme

QP CODE:411006

Reg. No: .....

## Final Year B.Pharm Degree Supplementary Examinations December 2022

### Pharmaceutical Chemistry - V (Medicinal Chemistry)

Time: 3 Hours

Total Marks: 100

- Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together • Leave sufficient space between answers
- Draw Diagrams wherever necessary.

#### Essays

(3x10=30)

1. Explain ionisation and protein binding as physicochemical parameters affecting the drug action
2. Discuss  $\pi$  substitution constant and sigma Hammett constant as parameters in QSAR.
3. With examples demonstrate the prodrugs for altering pharmacodynamics properties.

#### Short Notes:

(14x5=70)

4. Write the structure of beta lactam ring and write the structure of one Penicillin and cephalosporin antibiotics.
5. Draw the structure and mechanism of doxycycline.
6. Give the structure and synthesis of 5-fluorouracil.
7. Write a note on adrenergic blockers and give the synthesis of propranolol.
8. Draw the general structure of sulphanilamide and enlist any eight important structural features for antibacterial activity.
9. Write the structure of trimethoprim and explain the mechanism and uses.
10. Write the synthesis and mechanism of action of INH.
11. What are oral anti-hyperglycemic agents. Write the mechanism of two different classes.
12. What are selective COX-2 inhibitors. Give examples. Explain the mechanism.
13. Classify diuretics. Give examples and explain the mechanism of potassium sparing diuretics.
14. Define and name H<sub>2</sub> receptor antagonists. How are they clinically used.
15. What are anxiolytics and sedatives. Write the structure and mechanism of Diazepam and chlorpromazine.
16. Classify general anaesthetics giving examples. Enlist the ideal properties.
17. Name any two local anaesthetics and give the synthesis of any one.

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