

# 2010 scheme

QP CODE: 401006

Reg. No: .....

## Final Year B.Pharm Degree Supplementary Examinations June 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
- Write chemical structures wherever necessary.

### Essays

(3x10=30)

1. Classify sulphonamides with examples. Discuss the mechanism of action of sulphonamides. Outline the synthesis of any two sulphonamides.
2. Discuss the role of Quantitative Structure Activity Relationship (QSAR) in drug design.
3. Explain steric effect and hydrogen bonding in relation to biological activity

### Short notes

(14x5=70)

4. Outline the chemical synthesis and therapeutic uses of chlorpromazine
5. Explain the SAR of narcotic analgesics
6. Write the chemical structures of following drugs-
  - Dicyclomine • aspirin • diclofenac • cyclizine • omeprazole
7. Explain the mechanism of action and therapeutic use of 6-mercaptopurine
8. Summarize the structure activity relationship of penicillins.
9. Outline the chemical synthesis and therapeutic use of salbutamol
10. Write the structure, mechanism of action and uses of furosemide.
11. Discuss the application of prodrug design with any two examples
12. Explain the SAR of fluoroquinolones
13. What is redox potential and discuss its significance in drug design
14. Identify any one therapeutic use of following drugs-
  - Norfloxacin • Trimethoprim • Dapsone • Tinidazole • Acyclovir
15. Outline the chemical synthesis and mechanism of action of Tolnaftate
16. Give the structure and mechanism of action of Ranitidine and Clofibrate
17. Chemical classification of local anaesthetics

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