

QP CODE:411006

Reg. No:

**Final Year B.Pharm Degree Supplementary Examinations
November 2018
Pharmaceutical Chemistry - V
(Medicinal Chemistry)
(2012 scheme)**

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Draw chemical structure wherever necessary.

Essays

(3x10=30)

1. What are beta lactam antibiotics. Discuss the problems associated with natural penicillins and how it is rectified by semisynthetic derivatives.
2. Classify sulphonamides giving one structure from each class and discuss the importance of DHFR inhibitors in antimalarial therapy.
3. Classify DNA alkylating agents with one structure from each class and mention the mechanism of action and synthesis of methotrexate

Short Notes:

(14x5=70)

4. Discuss the applications of quantum mechanics.
5. Explain the importance of QSAR studies in drug design.
6. Outline the synthesis of indapamide and methyl dopa.
7. Classify anxiolytics with example. Give the synthesis of diazepam
8. Structure and uses of cefotaxime, tamoxifen, azithromycin and norfloxacin.
9. Discuss the SAR and mechanism of action of oral hypoglycemic agents.
10. Classify H₂ receptor antagonists giving one structure from each class.
11. Discuss the chemistry of macrolide antibiotics.
12. What are the importance of steric effect and redox potential in drug action.
13. Classify antidepressants and mention their uses.
14. What are prodrugs. Discuss their applications.
15. Outline the synthesis of DEC and dapsone.
16. Classify general anesthetics with example. Give the synthesis of lignocaine.
17. Discuss the importance of antihyperlipidemic agents with an example
