QP CODE:411006 Reg. No:

Final Year B.Pharm Degree Supplementary Examinations December 2017

PHARMACEUTICAL CHEMISTRY - V (Medicinal Chemistry) (2012 scheme)

Time: 3 Hours Total Marks: 100

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

Essay (3x10=30)

- 1. Explain the significance of CADD and molecular modelling in drug design.
- 2. Classify anticancer drugs giving one structure from each class and discuss the mechanism of action and synthesis of methotrexate and 5-flurouracil.
- Classify diuretics giving one structure from each class. Explain the mechanism of action and synthesis of furosemide and triamterene

Short Notes: (14x5=70)

- 4. Discuss the SAR of tetracyclines.
- 5. Classify antiviral agents and explain the mechanism of action acyclovir.
- 6. Outline the synthesis of paracetamol and ibuprofen.
- 7. Classify antimalarial agents with example. Give the synthesis of chloroquine.
- 8. What are the importance of proton pump inhibitors.
- 9. Structure and uses of lignocaine, chlorpromazine, salbutamol and halothane.
- 10. Discuss the SAR and mechanism of action of sulfonylureas.
- 11. Classify antihypertensive agents giving one structure from each class.
- 12. Discuss the chemistry of fluoroquinolones.
- 13. Discuss the mechanism of action of sulphonamides. Mention the structure and use of silver sulphadiazine.
- 14. What are the problems associated with natural penicillins
- 15. Classify beta adrenergic antagonists and mention their uses.
- 16. Explain the importance of protein binding and chelation on drug action.
- 17. Give the synthesis of tolnaftate and INH.
