QP CODE:411006 **Reg. No: ……..**

Final Year B.Pharm Degree Examinations May 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. Classify antibiotics with one structure from each class. Discuss the mechanism of action and synthesis of ampicillin and chloramphenicol.
2. Discuss the importance of quantitative structure activity relationship in drug design.
3. Classify sulphonamides giving one structure from each class and discuss the SAR of amino quinolines in antimalarial therapy.

Short Notes: **(14x5=70)**

4. Explain the role of antimetabolites in cancer therapy with examples.
5. Classify antifungal agents and explain the mechanism of action of clotrimazole
6. Outline the synthesis of metronidazole and PAS
7. Classify anti-tubercular agents with examples. Give the synthesis of INH.
8. Classify antihistaminic agents giving one structure from each class.
9. Structure and uses of cyclizine, cimetidine, metoprolol and tolbutamide.
10. Discuss the SAR and mechanism of action of ciprofloxacin.
11. Classify antipsychotic agents giving one structure from each class.
12. Discuss the chemistry of tetracyclines.
13. Explain the significance of optical isomerism of drug in relation to biological action
14. Outline the synthesis of doxepine and dicyclomine
15. Classify cholinergic blocking agents and mention their uses.
16. Discuss the applications of prodrugs.
17. Classify anticonvulsant drugs and give the synthesis of sodium valproate

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