

Reg. No .....

Name .....

17P3607

**MSc DEGREE END SEMESTER EXAMINATION- OCTOBER-NOVEMBER 2017**

**SEMESTER 3 : PHARMACEUTICAL CHEMISTRY**

**COURSE : 16P3CPHT09 ; PHARMACEUTICAL CHEMISTRY - I**

*(For Regular - 2016 admission)*

Time : Three Hours

Max. Marks: 75

**Section A**

**Answer any 10 (2 marks each)**

1. What is drug distribution?
2. What do you mean by allosteric site?
3. What is toxicology?
4. Explain the following terms  
a) Therapeutic index b) margin of safety of drugs
5. Draw the structure of clonidine and losartan.
6. Discuss the pharmacological action of dipyridamol.
7. Write a note on neurone blockers as antiarrhythmic agent. Explain with example
8. Prodrugs for ampicillin are more useful than ampicillin. Why ?
9. Explain the MOA of Rifampicin
10. Discuss the pharmacological action of Phenacetin and phenyl butazone..
11. Discuss the pharmacological action of flufenamic acid.
12. Explain the classification of sulphonamides on the basis of pharmacokinetic properties.
13. Outline the synthesis of Sulphathiazol.

**10 x 2 (20)**

**Section B**

**Answer any 5 (5 marks each)**

14. Give an account of antisense therapy
15. Write briefly on Phase-I metabolism
16. Explain the anticoagulant activity of coumarin derivatives. Mention their structure activity relationship.
17. Describe the synthesis and pharmacology of any one of the calcium channel blockers
18. Draw the structure of ampicillin and explain its characteristics
19. Outline the synthesis of proguanil from p-chlorophenyl guanidine. Write the MOA

and side effects of proguanil

20. Discuss in detail the SAR of Phenyl(ethyl)piperidines and its derivatives as narcotic analgesics.
21. Outline the synthesis of following drugs
  - a) Sulphamethoxazole
  - b) Dapsone

**5 x 5 (25)**

### **Section C**

**Answer any 2 (15 marks each)**

22. What do you mean by excretion of a drug? Discuss about different routes of drug excretion
23. Give an account of different receptor theories.
24. Discuss in detail the classification of drugs which are used as antipyretics and NSAIDs.
25. Write a note on various antiviral drugs. Explain their mode of action and therapeutic uses with suitable example. Outline the synthesis of acyclovir.

**2 x 15 (30)**