DMM-1566  
M. Sc. (Sem. IV) Examination  
March / April - 2016  
Medicinal Chemistry : Paper - IV  
(New Course)

Time : 3 Hours]  
[Total Marks : 70

Instructions :

(1) Fill up strictly the details of signs on your answer book.

Name of the Examination : M. SC. (SEM. 4)
Name of the Subject : MEDICINAL CHEMISTRY : PAPER - 4 (NEW)

Seat No. :  

Student's Signature :  

(2) Figures to the right indicate full marks of the questions.

1 Answer any three :

(a) What are non lactum antibiotics? Give an account of Bacitracin.

(b) Why antibiotics are called bactericide? Discuss SAR among penicillin.

(c) Give the structural formulae and uses of any four non classified antibiotics.

(d) Give synthesis and therapeutic uses of chloromycetin and methicilline.

2 Answer any three :

(a) Sulfonamides are bacteriostatic and not bactericidal – why? Discuss structural variation among sulfonamides.

(b) Discuss structural variation among cyclic basic chain analog and phenothiazine derivatives used as anti-histaminic agents.

(c) Why micro organisms responsible for tuberculosis and leprosy are called acid fast bacteria? Discuss the structural variationsd among antitubercular drugs.
(d) Give synthesis and uses of isoniazide and ethionamide starting from 4-methyl pyridine and 2-ethyl isonicotinamide respectively.

3 Answer any three :

(a) What are antimalarials? Classify them. Give an account 4-aminoquinoline and biguanide derivatives used as antimalarials.

(b) What is metastasis? State the characteristics of malignant tumor. Give an account of alkylating agents used in the treatment of cancer.

(c) State the names of plasmodia responsible for human malaria. Discuss SAR among antimalarial drugs.

(d) Give synthesis and uses of chloroquine and melphalan.

4 Answer any four :

(a) Name any four important antimalarials derived from 8-amino-6-methoxy quinoline nucleus. Give their structure and use.

(b) Define the term Invivo and Invitro. Discuss structural variation among sulfones used as antileprotic agents.

(c) What are cephalosporines? Discuss structural variation among first and second generation cephalosporines.

(d) Discuss the structural variation among amino-alkyl ether and ethylenediamine derivatives used as antiallergic drugs.

(e) Classify sulfonamides according to their duration of action. Give synthesis of succinyl-sulfathiazole.