



HEA-014-003705

Seat No. _____

M. P. M. (Sem. VII) (CBCS) Examination

November / December – 2017

Pharmaceutical Chemistry - IX

(Medicinal Chemistry - III)

Faculty Code : 014

Subject Code : 003705

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Attempt three questions from each section.
 - (2) Question 1 and 5 are compulsory.
 - (3) Figures to the right indicate full marks for the respective question.

SECTION - I

- 1 Answer the following questions : (any seven) 14**
- (1) Explain stereochemistry of penicillin.
 - (2) Why Plasmodium falciparum is the most dangerous species?
 - (3) Justify : Slow acetylators are more prone to INH toxicity than rapid acetylators.
 - (4) Justify: Supplement of Vit. B6 should be given with INH in T.B.
 - (5) Give name of the organism from which gentamycin, neomycin streptomycin and chloramphenicol were isolated.
 - (6) Give examples of DNA and RNA Viruses. Name the virus for chicken pox, conjunctivitis and rabies.
 - (7) Explain life cycle of malarial parasite.
 - (8) Give structure and mechanism of action of Chloramphenicol.
 - (9) Explain SAR of aminoglycosides antibiotics.
 - (10) Explain the term CADD.

- 2 (1) Explain mechanism of action and SAR of Penicillin. 7
 (2) Give synthesis of chlorambucil and amantadine. 6
- 3 (1) Give SAR of tetracyclines and macroiide antibiotics. 7
 (2) Classify sulphonamides with suitable examples and explain its mechanism of action. 6
- 4 (1) What is QSAR? Write a note on combinatorial chemistry and parallel synthesis. 7
 (2) Give method of synthesis and uses of Ketoconazole and chloroquin. 6

SECTION - II

- 5 Answer the following questions : (any **two**) 14
 (1) Write a note on anthelmintic agents and give synthesis albendazole.
 (2) Write a note on anti-malarial drugs. Give SAR of Quinolines.
 (3) Explain SAR of fluoroquinolones and give synthesis of sulphacetamide.
- 6 (1) Write a note on anti-cancer agents. 7
 (2) Define β -lactam antibiotics. Classify cephalosporin antibiotic with suitable examples. 6
- 7 (1) Give classification and mechanism of action of drugs which are used to treat TB. 7
 (2) Define and classify anti-viral agents with suitable examples. 6
- 8 Answer the following :
 (1) "Free Wilson Mathematical model of QSAR" and give application of QSAR in drug design. 7
 (2) Explain antifungal agents. Explain mechanism of action of each class. 6