Roll No. | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 11

M.Sc. Chemistry (Sem.-3)

MEDICINAL CHEMISTRY

Subject Code : CHL-505B-18

M.Code : 76683

Date of Examinaion: 23-12-22

Time : 3 Hrs. **Max. Marks : 70**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains EIGHT questions carrying FIVE marks each and students have to attempt any SIX questions.**
3. **SECTION-C will comprise of TWO compulsory questions with internal choice in both these questions. Each question carries TEN marks.**

SECTION-A

1. Write briefly :

a) Draw the structure and stereochemistry of cephalosporins. What is the mode of action of cephalosporin?

b) Discuss the structure-activity relationship of antimicrobial drug chloramphenicol.

c) Discuss the synthetic route of Norflaxacin.

d) Write a short note on various applications of Metronidazole.

e) Discuss tile structure and mechanism of action of anthelmintic drug Stibophen.

f) Illustrate the commercial synthetic route to tryparasamide.

g) Write a short note on structure-activity relationships of antimalarial drug mefloquine.

h) What is gentian violet used for?

i) What is the structure and mechanism of action of antifungal drug econazole?

j) How does Nafttidine synthesized?

SECTION-B

2. Explain the structure, mode of action and clinical applications of sulfanilamide.

3. Discuss the synthetic or semi-synthetic route for sulfamethyoxazole and difloxacin.

4. Write a short note on structure and mode of action of bismuth sodium thioglycollate and furazolidone.

5. Explain the synthetic or semi-synthetic route for iodoquinol and ronidazole.

6. Write a short note on structure, mode of action and applications of biguanides.

7. How will you explain the synthetic route of pyremethamine and sontoquine?

8. Explain the structure, structure activity relationship and applications of antifungal drug acrisocrine.

9. How will you explain the synthetic route of ketoconazole and fluconazole?

SECTION-C

10. Discuss the mode of action and structure-activity relationships of following drugs :

    a) Dapsone,

    b) nalidixic acid

OR

Discuss the mode of action and structure-activity relationships of following drugs :

    a) diloxanide furoate

    b) aminoacridine

11. Discuss the synthetic route for following drugs :

    a) 7-Aminocephalosporanic acid

    b) Nifurfimax

OR

Discuss the synthetic route for following drugs :

    a) Trimethoprim

    b) Niridazole

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.