

Roll No.

Total No. of Pages : 02

Total No. of Questions : 19

M.Sc. (Chemistry) PIT (2015 to 2017) (Sem.-4)

MEDICINAL CHEMISTRY-II

Subject Code : CHL-512B

Paper ID : [74899]

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 SIX questions carrying FIVE marks each and students have to attempt ALL questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Comment on penam based nomenclature of penicillin antibiotics.
2. What is the mechanism of action of Isoniazid?
3. Give structure of Pyrazinamide and its important uses.
4. What is the stereochemical relationship between quinine and quinidine?
5. Name and give the structures of two systemic amoebicides.
6. Give structure and mechanism of action of one imidazothiazole derivative which is used as Anthelmintics.
7. Give the structure of any one antibiotic that binds to 30s ribosomal unit and alter protein synthesis.
8. Give medicinal uses of Mefloquine.
9. Give the structures of two antifungal triazoles.
10. What are anthelmintics?

SECTION-B

11. Describe the synthesis and mechanism of action of Chloramphenicol.
12. Give the SAR of Fluoroquinolones for the antibacterial activity.
13. What are systemic amoebicides? Give synthesis of metronidazole.
14. Write a short note on first line anti-TB drugs.
15. Describe fatty acid and their derivatives used for dermatophytosis.
16. Give synthesis and mechanism of action of Clotrimazole.

SECTION-C

17. Describe SAR of tetracycline antibiotics.
18. Describe structure of various azoles which are used in the treatment of fungal infections. Give synthesis of any one triazole from this category.
19. Give synthesis and mechanism of actions of **Any Two** :
 - a. Pyrimethamine.
 - b. Thiabendazole.
 - c. Ciprofloxacin