

| Roll No. | | | | | | | Total No. of Pages: 0 |
|----------|--|--|--|--|--|--|-----------------------|
| | | | | | | | 1000110101010 |

Total No. of Questions: 18

Pharm. D (Sem.-3)
MEDICINAL CHEMISTRY
Subject Code: 3.5

M.Code: 71438

Time: 3 Hrs. Max. Marks: 70

INSTRUCTION TO CANDIDATES:

- 1. SECTION-A contain SEVEN questions. Attempt any FIVE questions. Each question will carry TWO marks each.
- 2. SECTION-B contain EIGHT questions (Short Essay Type). Attempt any SIX questions. Each question will carry FIVE marks.
- 3. SECTION-C contain THREE questions (Long Essay Type). Attempt any TWO questions. Each question will carry FIFTEEN marks.

SECTION-A

- Q1 What are two major limitation of CADD?
- O2 What are antisense molecules?
- Q3 What are bioprecursor? Give structure of sulphonamide.
- Q4 Draw and give uses of the structure of benzalkonium chloride.
- Q5 What are parabens? Give structure of any two parabens.
- Q6 What are pediculicides? Draw the structure of Lindane pediculicide
- Q7 What are high osmolar contrast media? Draw the structure of any compound of this class.

SECTION-B

- Q8 Describe various phenol and their derivatives used for the treatment of dermatophytose.
- Q9 Explain the SAR of fluoroguinolone antibacterial.

1 M-71438 (S15)-1283



- Q10 Draw the structures of four primary drugs used in the treatment of tuberculosis. Outline synthesis of any one of these agents.
- Q11 Draw the structures of any two HIV protease inhibitors. Give synthesis of any one of them.
- Q12 Explain SAR of tetracycline antibiotics.
- Q13 Draw structures of four drugs used in the fixed combination therapy for the treatment of malaria.
- Q14 Draw the structure of thyroid hormones. Comment on conformational aspects of T3 and T4.
- Q15 Describe the mechanism of sulphonamides for anti-bacterial activity. Write the synthesis of sulfadiazine.

SECTION-C

- Q16 Describe the general structures of aminoglycoside. Explain SAR of aminoglycosides antibiotic.
- Q17 a) Write a brief account on SAR of thiazide diuretics.
 - b) Name one potassium sparing diuretics. Write a note on its site and mechanism of action.
 - c) Write the synthesis of ethacrynic acid and chlorthiazide.
- Q18 a) Write a note on first generation calcium channel blockers.
 - b) Give a brief account on antianginal action of nitrovasodilators. Draw the structures of any two.
 - c) Name the class of anti-arrhythmic drug to which procainamide belong and give the synthesis of procainamide.

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.

2 | M-71438 (S15)-1283