

M. SC. (Organic Chemistry) Sem-III (Choice Based Credit & Grade System) : SUMMER - 2019

SUBJECT: MEDICINAL CHEMISTRY

Day: Thursday
Date: 02/05/2019

S-2019-1183

Time: 03.00 PM TO 06.00 PM
Max. Marks: 60

N.B:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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SECTION – I

- Q.1** Answer **ANY THREE** of the following: **(15)**
- a) Describe the outline of chemotherapy of tuberculosis
 - b) Explain in short- Chemical assay and give its significance.
 - c) Give graphical presentation to find i. ED⁵⁰ ii. LD⁵⁰
 - d) Define the term- i. pharmacophore ii. pharmaceuticals
 - e) Give structure and mechanism of action of streptomycin
- Q.2** Answer **ANY THREE** of the following: **(15)**
- a) Write note on –bioassay of drug
 - b) Explain- medicinal chemistry is an interdisciplinary subject
 - c) Give structure and mechanism of action of 4-amino salicylic acid
 - d) Write note on –clinical trial of drug
 - e) Explain the term chemotherapy

SECTION – II

- Q.3** Solve **ANY THREE** of the following: **(15)**
- a) What are antibiotics? Name any two antibiotics and their microbial source
 - b) Give the SAR of penicillin
 - c) Write note on aromatic hydroxylation of drug
 - d) Give the general mechanism of action of any two antibiotics that inhibit bacteria
 - e) Explain the cyclic mechanism of CYP 450
- Q.4** Solve **ANY THREE** of the following: **(15)**
- a) Give example of oxidative metabolism catalysed by C450
 - b) Write note on- synthesis of penicillin
 - c) Write note on- significance of R group of semisynthetic penicillins
 - d) Write note on- sulfonation reaction in drug metabolism
 - e) Write note on-Drug metabolism reactions

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