

No. of Printed Pages : 03

Roll No.

DD295

M. Sc. EXAMINATION, May 2019

(Fourth Semester)

(B. Scheme) (Main & Re-appear)

CHEMISTRY

CH654B

Organic Chemistry Elective-II

(Medicinal Chemistry)

Time : 3 Hours]

[Maximum Marks : 100

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit.

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P.T.O.

Unit I

1. Explain the following terms :
 - (a) Isostereism and Bio-isosterism
 - (b) Drug and Prodrug
 - (c) Pharamacodynamics and Pharma-cokinetics
 - (d) Discovery through lead compound. 20
2. Discuss in detail about the factors governing drug design and comment on the role of stereochemistry in drug design. 20

Unit II

3. (a) Write down Sheehan's synthesis for phenoxy methyl penicillin. 10
(b) What do you mean by anti-neoplastic agents ? Give synthesis for any one anti-cancer drug. 10
4. Classify sulphonamides for the following with synthesis of one example :
 - (a) General infections

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- (b) Urinary infections
- (c) Intestinal infections
- (d) Local infections. 20

Unit III

5. What do you understand by carrier linked product ? Explain different types of carrier linked products with suitable examples. 20
6. (a) Explain why prodrugs strategy has great importance in drug design. 10
(b) Discuss prodrug where activation of easter pro-drug is involved with advantages and disadvantages. 10

Unit IV

7. Define drug polymer conjugates and comment on their utility in biomedical applications. 20
8. Comment on the biomedical applications of polyglycerol. 20

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