No. of Printed Pages: 03	Roll No
--------------------------	---------

DD-295

M. Sc. EXAMINATION, May 2017

(Fourth Semester)

(Main & Re-appear)

CH-654-B

CHEMISTRY

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: The question paper comprises of eight questions, two from each Unit. The candidates will be required to attempt *Five* questions in all, selecting at least *one* question from each Unit.

(3-21/19)M-DD-295

P.T.O.

Unit I

- (a) Explain concept of lead in drug design with example.
 - (b) How the method of variation is used in drug design?
- 2. (a) How the steric factors can influence the drug design?
 - (b) Explain in detail The Hansch equation and its salient features. 10

Unit II

- 3. (a) Write short note on antipyretic drugs and give the synthesis of paracetamol. 10
 - (b) Write short note on Sulpha Drugs, also give synthesis for sulphonamide example.

10

4. What role Pencillamine and Peniloaldehyde paly in the structure elucidation of Penicillin and how the structures of these were established.

Unit III

- 5. How would you classify the Pro-drugs? Give brief comprehensive details with regard to the following:20
 - (a) Carrier Linked Pro-drug
 - (b) Mutual Pro-drug
 - (c) Bio-processor Pro-drugs.
- **6.** Explain by taking an example pro-drug where activation of ester pro-drug is involved. Also discuss the advantages and disadvantages. **20**

Unit IV

- Explain Polymer Therapeutics and comment on their applications in today's drug discovery.
- 8. Explain EPR effect amd comment on its utility in anticancer drug discovery.20

M-DD-295 2

(3-21/20)M-DD-295

3

90