

Enrollment No: _____ Exam Seat No: _____

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name: Pharmaceutical Chemistry-IV (Medicinal Chemistry-I)

Subject Code: 4PS04PCH4

Branch: B.Pharm.

Semester: 4

Date: 20/04/2017

Time: 10:30 To 01:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1 Define the following terms.

- | | |
|----------------------------|---|
| a) Laxatives. | 1 |
| b) Proton pump inhibitors. | 1 |
| c) Antiemetics. | 1 |
| d) Prokinetics. | 1 |
| e) Diagnostic agents. | 1 |
| f) Decongestants. | 1 |
| g) Mucolytics. | 1 |
| h) Antitussive agents. | 1 |
| i) Bioisosterism. | 1 |
| j) Drug therapy. | 1 |
| k) Medicinal chemistry. | 1 |
| l) Receptor. | 1 |
| m) Drug metabolism. | 1 |
| n) Solubility. | 1 |

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions

- | | |
|---|---|
| a) Explain various physico-chemical properties of drug molecules influencing biological activities. | 7 |
| b) Explain in detail protein binding of drug molecules. | 7 |

Q-3 Attempt all questions

- | | |
|--|---|
| a) Write in detail the stereo chemical features of drug molecules. | 7 |
| b) Write note on Bio-isosterism in drugs. | 7 |

Q-4 Attempt all questions

- | | |
|---|---|
| a) Write detail procedures of drug metabolism. | 7 |
| b) Write various anti-asthmatic agents with examples and their mechanism of action. | 7 |



- Q-5** **Attempt all questions**
- a) Write various classes of drugs that act on respiratory tract and explain about expectorant and antitussive agents. 7
- b) Explain the mechanism of action of proton pump inhibitors. 7
- Q-6** **Attempt all questions**
- a) Define antisecretory agents. Classify and write mechanism of action of antisecretory agents alongwith synthesis of Ranitidine. 7
- b) Define and classify various classes of drugs acting on G.I. Tract and write synthesis of omeprazole and its use. 7
- Q-7** **Attempt all questions**
- a) Write a note on Autocoids. 7
- b) Write the detail classification of H₂ antagonists with example from each class. 7
- Q-8** **Attempt all questions**
- a) What are diagnostic agents? Describe the importance of Radiopharmaceuticals. 7
- b) Write the history, discovery and biosynthesis of eicosanoids. 7

