

Enrollment No: _____

Exam Seat No: _____

C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name : Medicinal Chemistry - I

Subject Code : 5SC03MDC1

Branch : M.Sc. (Chemistry)

Semester : 3

Date : 29/11/2018

Time : 02:30 To 05:30

Marks : 70

Instructions:

- (1) Use of Programmable calculator and 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.
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SECTION – I

- Q-1 Attempt the following questions (07)**
- a. Define: Pharmacodynamics **01**
 - b. What is the difference between drug and medicine? **01**
 - c. Define the term pharmacophore. **01**
 - d. Describe in short the term drug metabolism. **01**
 - e. Define: Medicinal chemistry **01**
 - f. Define: Alkaloids **01**
 - g. What is pinocytosis? **01**
- Q-2 Attempt all questions (14)**
- a. Explain the classification of drugs based on sources. **07**
 - b. Discuss the current researches on nanomaterials for development of new drug. **07**
- OR**
- Q-2 Attempt all questions (14)**
- a. Explain Cumulative, Additive, Synergistic and antagonistic Effects with response vs. time curve. **07**
 - b. Write a note on the protein, polymer and nanotechnology based delivery system. **07**
- Q-3 Attempt all questions (14)**
- a. Explain the principles of drug action. **07**
 - b. Write a note on receptor agonist. **07**
- OR**
- Q-3 Attempt all questions (14)**
- a. Explain the dose response curve. **05**
 - b. Write a brief note on synergism and antagonism. **05**
 - c. Explain the factors affecting drug action. **04**



SECTION – II

- Q-4** **Attempt the following questions** **(07)**
- a. Define: Antagonist **01**
 - b. Give only types of endocytosis. **01**
 - c. Define the term: Bioisosteres **01**
 - d. Write the statement of Fick's Law. **01**
 - e. Define: Upregulation **01**
 - f. What is called drug distribution? **01**
 - g. Write the full form of QSAR. **01**
- Q-5** **Attempt all questions** **(14)**
- a. Discuss the routes of drug administrations. **07**
 - b. Write a note on factors affecting drug absorption. **07**
- OR**
- Q-5** **Attempt all questions** **(14)**
- a. Discuss the factors affecting drug distribution. **07**
 - b. Explain phase-I and Phase-II metabolism. **07**
- Q-6** **Attempt all questions** **(14)**
- a. Discuss the methods of lead discovery. **07**
 - b. Explain the SAR of acetylcholine. **07**
- OR**
- Q-6** **Attempt all questions** **(14)**
- a. Explain the different Isosterism concepts. **07**
 - b. Discuss the important physicochemical properties of molecules for QSAR study. **07**

