Enrollment No: _____ Exam Seat No:_____

C.U.SHAH UNIVERSITY

Summer Examination-2018

Subject Name: Medicinal Chemistry-I

Subject Code: 5SC03MDC1 Branch: M.Sc. (Chemistry)

Semester: 3 Date: 22/03/2018 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.

SECTION – I

Q-1 **Attempt the Following questions** **(07)**

a. Define: Lead Compound **(1)**
b. Define the term Medicinal Chemistry. **(1)**
c. Write the full form of INN. **(1)**
d. Define the term duration of action. **(1)**
e. Write the full form of CADN. **(1)**
f. Enlist the main routes of excretion. **(1)**
g. Define the term Partial agonist. **(1)**

Q-2 **Answer the following questions** **(14)**

a. Write a note on sources of Drugs. **(7)**
b. Explain the various methods of lead discovery. **(7)**

OR

Q-2 **Answer the following questions** **(14)**

a. Explain the classification of bio-isosters. **(7)**
b. Write a note on identification of pharmacophore for optimization of lead. **(7)**

Q-3 **Answer the following questions** **(14)**

a. Discuss the effect of lipophilicity in drug activity by mathematical equation term with appropriate example. **(7)**
b. Explain the electronic effect in drug activity by proper example. **(7)**

OR

Q-3 **Answer the following questions**

a. Write a note on nanorobotics and nanonephrology in medicinal chemistry. **(7)**

b. Write the free Wilson approach in QSAR and explain various merits and demerits of free Wilson approach. **(7)**

SECTION – II

Q-4 **Attempt the Following questions** **(07)**

a. Write the name of the enzyme which use in drug metabolism process. **(1)**

b. Write the full form of SAR. **(1)**

c. Define: Antibiotics **(1)**

d. Define protoalkaloids with example. **(1)**

e. Write the name of structural proteins which identified as a drug receptor. **(1)**

f. Define Pharmacodynamics **(1)**

g. Define Intrinsic activity **(1)**

Q-5 **Answer the following questions** **(14)**

a. Explain the various factors affecting drug action. **(7)**

b. Explain the effect of receptor number on drug response. **(7)**

OR

Q-5 **Answer the following questions**

a. Write the various drug transport process around the cell membrane. **(7)**

b. List the different factors affecting absorption of drug and explain any five with proper examples. **(7)**

Q-6 **Answer the following questions** **(14)**

a. Write the principle of drug action and explain different types of receptor. **(7)**

b. Explain the different factors affecting drug distribution. **(7)**

OR

Q-6 **Answer the following questions**

a. Explain the applications of Nanomedicine. Also write biomedical applications of nanoparticles. **(7)**

b. Write a note on various route of drug administration. **(7)**