Code No. 3301/E

FACULTY OF SCIENCE
B.Sc. VI-Semester (CBCS) Examination, May / June 2019

Subject : Chemistry

Paper – VIII (A) (DSE E-1) : Medicinal Chemistry

Time : 3 Hours   Max. Marks: 60

PART – A (5 x 3 = 15 Marks)
(Short Answer Type)
Note : Answer any FIVE of the following questions.

1 Define Pharmacology, Pharmacodynamics and Pharmacophore.
2 Give the generic name and trade name for any two drugs.
3 Explain briefly the role of OH group and double bond in drug-receptor complex formation.
4 What are agonists and antagonists? Give examples.
5 What are anti-diabetic and antipyretic drugs? Give one example for each.
6 Write the synthesis and therapeutic activity of Dapson.
7 What are hormones? Give two examples.
8 What are micronutrients? How Na and Ca are helpful for good health?

PART – B (45 Marks)
(Essay Answer Type)
Note: Answer ALL from the questions.

9 (a) (i) Give the classification of drugs based on therapeutic activity with examples.   (11)
      (ii) Discuss about routes of administration of drugs
                    OR
   (b) (i) Describe briefly Phase I and Phase II reactions in metabolism of drugs.
      (ii) Write a short note on metabolites and antimetabolites.

10 (a) (i) Write the mechanism of enzyme catalyzed reations.   (11)
      (ii) Discuss about different types of enzyme inhibition.
                    OR
   (b) (i) Explain the factors affecting the enzymatic reactions.
      (ii) Explain the structure activity relationship studies of Sulfonamides.

11 (a) Write the synthesis and therapeutic activity of Omeprazole, Benzocaine and Cisplatin.   (11)
                    OR
   (b) (i) Discuss about general and local anesthetics.
      (ii) Write the semi synthesis and therapeutic activity of Penicillin – G.

12 (a) (i) What are adrenergic drugs? Write the structure and therapeutic activity of Salbutamol.   (12)
      (ii) Discuss about the sources and deficiency disorder of water soluble vitamins.
                    OR
   (b) (i) Write about the deficiency disorders of A, D, E vitamins.
      (ii) Discuss about the drug action of Dopamine and Levodopa.