29/3/22

Total No. of printed pages = 2

MPC 103 T

Roll No. of candidate | | | | | | | | | | |

2022

M.Pharm. 1st Semester End-Semester Examination

Pharmaceutical Chemistry

ADVANCED MEDICINAL CHEMISTRY

New Regulation (w.e.f. 2017-18)

Full Marks – 75 Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer question No. 1 and any *seven* from the following.

1. Answer the following questions : (5 × 1 = 5)
   (a) Name the biochemical classes of drug target.
   (b) What is the goal of analog design?
   (c) Draw the structure of two COX 2 inhibitors.
   (d) Write down the functions of leucotrienes.
   (e) Define antibiotic resistance.

2. What are the ways to find the lead compound? Explain elaborately. (10)

3. Explain theories of drug-receptor interaction and emphasize Ligand gated and G-protein coupled receptor. (5 + 5 = 10)

4. Write a note on artificial enzymes and its importance citing example. (10)

5. Explain the role of chirality in selective and specific therapeutic agents elaborately. (10)

6. Define prodrug. Classify carrier linked prodrug and write down the pharmaceutical application of prodrug. (2 + 4 + 4 = 10)

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7. Describe the genetic principles of drug resistance. Write down some strategies to combat drug resistance in antibiotics and anticancer therapy. (4 + 6 = 10)

8. Write down the synthesis of following drugs: (5×2=10)

   (a) Ethosuximide

   (b) Valproic acid

   (c) Promethazine

   (d) Phenytoin

   (e) Clonidine

9. Define and classify peptidomimetics. Explain the therapeutic values of peptidomimetics citing examples. (4 + 6 = 10)

10. Classify antineoplastic and antiviral agents with suitable example and draw the structure of two drugs with each category. (10)