K-406

Total Pages : 3   Roll No. ....

MCH-604

Drugs and Pharmaceuticals-I

M.Sc. Chemistry (MSCCH)

3rd Semester Examination, 2023 (Dec.)

Time : 2 Hours]   **[Max. Marks : 35**

Note : This paper is of Thirty Five (35) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

SECTION–A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

$(2 \times 9½ = 19)$

1. Explain the Hansen method of QSAR studies.

2. Discuss the development of Salbutamol.

3. What are receptors? Briefly explain the role of receptors in the regulation of physiological reactions.

4. What is the lead compound for sulphonamide antibacterial? Write the structure sulphanilamides.

5. Explain the importance of enzymes and enzyme products in drug discovery.

SECTION–B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only.   (4×4=16)

1. Write any two structures of the natural product leads and the drugs derived from them.

2. Write a short note on any *two* of the following :

(a) Penicillin.

(b) Quinine.

(c) Adrenaline.

(d) Sulfacetamide.

3. Discuss the concept of pro-drugs and soft-drugs in drug design.

4. Explain briefly about Houghton's Tea Bag procedure.

5. Discuss the merits and demerits of QSAR.

6. Explain why aspirin (acetylsalicylic acid) is used as good pain killer.

7. Discuss the application of the partition coefficient with any suitable example.

8. Define analgesics. Give some examples.

———————————