Total Pages : 3   **Roll No. ....**

MSCCH–608

M.Sc. CHEMISTRY (MSCCH)

(Medicinal Chemistry)

4th Semester Examination, Session December 2024

Time : 2:00 Hrs.   Max. Marks : 70

Note :– This paper is of Seventy (70) 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   2×19=38

Note :– Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Discuss the following :

   (a) Role of pharmacokinetics in drug design

   (b) Structure-activity relationship used in drug design

2. Explain the different routes enable the passage of drugs through membranes.

3. Gives the synthesis of the following drugs :

   (a) Mechlorethamine

   (b) Cyclophosphamide

4. What is the Biotransformation ? Discuss the different type of Biotransformation reactions.

5. What is the chemotherapy ? Discuss the different type of the Chemotherapy.

Section–B

Short Answer Type Questions   4×8=32

Note :– Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Discuss about the enzyme stimulation.

2. What is the Genetherapy ?

3. What is the role of alkylating agents in treatment of cancer ?

4. What is the absorption phase in pharmacokinetics ?

5. Explain different factors that influence the pharmacokinetics of a drug.

6. Discuss the role of Antimetabolites in the treatment of cancer

7. Attempt any *two* of the following :

   (a) Anineoplastic agents.

   (b) Soft drugs.

   (c) Cardiovascular drugs.

8. Write short notes on the following :

   (a) Molecular docking

   (b) Hansch analysis

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