



UTTARAKHAND OPEN UNIVERSITY, HALDWANI (NAINITAL)

M.Sc. Second Year Chemistry*Last Date of Submission:***15 May, 2015****Course Title: Drugs and Pharmaceuticals****Course Code: CHE554****Year: 2014-15****Maximum Marks: 40 Marks****Section 'A'**

Section 'A' contains 08 short answer type questions of 5 marks each. Learners are required to answer 4 questions only. Answers of short answer-type questions must be restricted to 250 words approximately.

Briefly discuss the following:

1. Write a short note on the followings:
 - i. Non-random screening.
 - ii. High throughput screening
 - iii. Folklore medicines
2. Explain briefly about pharmacokinetics based drug design.
3. Explain the classification of cephalosporin drugs? Give one examples of each.
4. What is the enzyme inhibition? Explain.
5. Write the structure and uses of the following;
 - i. Atropine
 - ii. Acetyl cholinesterase
 - iii. Carbachol
 - iv. Histamine
 - v. Amino tetracycline
6. Formulate the synthesis of Penicillin.
7. Classify the bacteria and explain.
8. Explain the mechanism of action of DNA-polymerase inhibitors.

Section 'B'

Section 'B' contains 04 long answer-type questions of 10 marks each. Learners are required to answers 02 questions only.

1. i. Write short note on history of fermentation of drugs?
 - ii. Explain the Hansch method of Qsar studies.
 - iii. What are the drugs used as the adrenergic stimulants?
2. Classify histamine receptors. Name any two drugs acting as H₂ histamine receptors antagonists and write their structure.
3. What are the quality control methods in drug development?
4. Write down the synthesis of following drugs:
 - (a) Methyl dopa
 - (b) Dopamine
 - (c) Phenoxybenzamine
 - (d) Captopril

