

M.Sc. - II (Chemistry) (NEP Pattern) Semester-IV  
**STPG04CHE04 - Elective : Medicinal Chemistry-II**

P. Pages : 2

Time : Three Hours



**GUG/S/25/16329**

Max. Marks : 80

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1. a) Explain about Indian and International framework for patent protection. 8  
b) Discuss in brief about diagnostic agents. 8

**OR**

- c) Explain TLC in details. 4  
d) What is paper chromatography? Explain. 4  
e) Discuss how to protect patents, copyrights and trademarks. 4  
f) Write a note on drug rules. 4
2. a) Discuss the F-Test with formula, calculation and common examples. 8  
b) Write down the synthesis of following- 8  
i) Acyclovir ii) Amantadine

**OR**

- c) Write down the synthesis of chloroquine. 4  
d) Give the synthesis of proguanil. 4  
e) Describe the steps involved in a sampling of solids and liquids. 4  
f) Give short account on investigational drugs. 4
3. a) What are antihistaminic agents? Explain the clinical effects of antihistamine and discuss inhibition and release of histamine. 8  
b) Write note on chloramphenicol and explain the chemical degradation of Penicillin. 8

**OR**

- c) Give the synthesis and medicinal importance of methacycline. 4  
d) Write the note on Piperzine derivatives 4  
e) Explain histamine. What is Histamine H1 receptor antagonist? 4  
f) Discuss about the classification of cephalosporins. 4

4. a) i) Give the origin of antiamoebic drugs. 8  
 ii) Explain drugs used in cestode infection and trematode infection.  
 b) Explain synthesis of phenyl butazone and its derivatives. Give their medicinal importance. 8

**OR**

- c) Explain anthelmintics of Helminthiasis. 4  
 d) Explain etiology of inflammatory diseases. 4  
 e) Explain drugs used in nematode infection. 4  
 f) Write a short note Pyrazalone derivatives. 4
5. Write **any eight**.
- a) Differentiate between partition and adsorption TLC techniques. 2  
 b) Elaborate HPLC and LCMS meaning. 2  
 c) What are drug acts? Explain. 2  
 d) What is T-test? 2  
 e) Explain chemotherapy for HIV. 2  
 f) Name any two viral diseases. 2  
 g) Define SAR. 2  
 h) What are miscellaneous antibiotics. 2  
 i) Define the term Antihistamine agent. 2  
 j) Draw the structure of Haloquinol and indoleacetic acid. 2  
 k) What are the species involved in trematode infection? 2  
 l) Define inflammatory response. 2

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