

M.Sc.(Chemistry) (CBCS Pattern) Fourth Semester CBCS  
**PSCHT16.5-Elective-Medicinal Chemistry**

P. Pages : 2

Time : Three Hours



**GUG/W/18/11464**

Max. Marks : 80

1. a) Write in brief Indian and International framework for patent protection. 8
- b) Discuss the principles of various types of detectors used in Gas chromatography. 8

**OR**

- c) Write a short note on drugs acts and drugs rules. 4
- d) What are the important features and advantages of Thin layer chromatography. 4
- e) Discuss how to protect patents, copyrights and trademarks. 4
- f) Write a note on Radio pharmaceuticals. 4
2. a) Discuss the F-Test with formula, calculation and common examples. 8
- b) Give the synthesis and uses of: 8
- i) Proguanil ii) Amantadine

**OR**

- c) Discuss the malarial parasite's life cycle. 4
- d) Write a note on chemotherapy for HIV. 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 is meant by histamine antagonist? Give 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) What are  $\beta$ -Lactam antibiotics? Enlist narrow spectrum and broad spectrum antibiotics with examples. 4
- d) Give the synthesis of phenothiazines & mention its uses. 4
- e) Give the synthesis & medicinal importance of methacycline. 4
- f) Write note on miscellaneous antibiotics. 4

4. a) i) Give the origin of antiamoebic drugs. 8  
ii) Explain drugs used in cestode infection and trematode infection.  
b) i) Discuss the etiology of inflammatory diseases. 8  
ii) Describe inflammatory response of anti-inflammatory drugs.

OR

- c) Write the synthesis and side effects of clioquinol. 4  
d) Give the synthesis and mode of action of phenylbutazone. 4  
e) Explain drugs used in nematode infection. 4  
f) Write a short note on iodoquinol. 4  
5. a) Write use of radioisotopes for radiology and CT. 2  
b) Distinguish between thin layer and paper chromatography. 2  
c) Give short account on HIV. 2  
d) Write SAR of tetracycline. 2  
e) Give classification of cephalosporins. 2  
f) Write name of four viruses and diseases caused by them. 2  
g) Write a short note on Helminthiasis. 2  
h) Explain biochemical response of anti-inflammatory drugs. 2

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