

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

P. Pages : 2

Time : Three Hours



**GUG/W/24/11464**

Max. Marks : 80

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1. a) Discuss the principles of various types of detectors used in Gas Chromatography. 8
- b) Explain in detail Indian & International framework for patent protection. 8

**OR**

- c) Write a short note on drugs rules and drug acts. 4
- d) Discuss how to protect patents, copyrights and trade marks. 4
- e) Discuss HPLC technique for drugs. 4
- f) Explain radio pharmaceuticals. 4
2. a) Discuss F & T test with formula, calculation and suitable examples. 8
- b) i) Explain in brief life cycle of malarial parasite. 8
- ii) Write a note on development of antimalarials and chemotherapy of malaria.

**OR**

- c) Discuss the malarial parasite's life cycle. 4
- d) Discuss synthesis of Idoxuridine. 4
- e) Describe the steps involved in a sampling of solids and liquids. 4
- f) Give short account on investigational drugs. 4
3. a) Explain in detail about  $\beta$ -lactam antibiotics & give classification of antibiotics. 8
- b) What are antihistamine agents? Explain histamine H<sub>1</sub> – receptor antagonists. 8

**OR**

- c) Explain role of inhibitors of histamine release. 4
- d) Give synthesis and medicinal importance of methacycline. 4

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|-----------|--|---|
| e)        | Give the synthesis of alkyl amines.                            | 4 |
| f)        | Write note on miscellaneous antibiotics.                       | 4 |
| <b>4.</b> | a) i) Discuss the etiology of inflammatory diseases.           | 8 |
|           | ii) Describe inflammatory response of anti-inflammatory drugs. |   |
|           | b) Explain the synthesis of-                                   | 8 |
|           | i) Iodoquinol  |   |
|           | ii) Halquinol  |   |

**OR**

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|-----------|--|---|
| c)        | Write the synthesis and side effects of clisoquinol.     | 4 |
| d)        | Explain synthesis of Pyrole acetic acid derivative.      | 4 |
| e)        | Give the synthesis of Niclosamide.                       | 4 |
| f)        | Give the synthesis of pyrazolone derivative.             | 4 |
| <b>5.</b> | a) Explain paper chromatography.                         | 2 |
|           | b) What is LCMS?   | 2 |
|           | c) Name any four viral diseases.                         | 2 |
|           | d) Write the structure of chloroquine.                   | 2 |
|           | e) Explain the term histamines.                          | 2 |
|           | f) Give classification of cephalosporins.                | 2 |
|           | g) What are anthelmintics drugs? Give its example.       | 2 |
|           | h) Write the structure of indole acetic acid derivative. | 2 |

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