

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**B.PHARM - SEMESTER- 7 EXAMINATION – SUMMER -2019**

**Subject Code: 270006**
**Date: 20-05-2019**
**Subject Name: Pharmacology-III**
**Time: 02:30 PM TO 05:30 PM**
**Total Marks: 80**
**Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|-------------|-----|---|-------------------|
| <b>Q.1</b>  | (a) | Define and classify chemotherapeutic agents according to mechanism of action and based on spectrum.                                 | <b>06</b>         |
|             | (b) | Classify sulfonamides. Write mechanism of action, antibacterial spectrum of sulfamethoxazole.                                       | <b>05</b>         |
|             | (c) | Discuss the detail pharmacology of Penicillin – G.  | <b>05</b>         |
| <b>Q.2</b>  | (a) | Classify anti-viral agents. Discuss the mechanism of action and antibacterial spectrum and uses of antiretroviral agents.           | <b>06</b>         |
|             | (b) | Explain the mechanism of action, mechanism of resistance and specific adverse effects of streptomycin.                              | <b>05</b>         |
|             | (c) | Classify antimalarial drugs and discuss mechanism of action and adverse effect of quinidine.  | <b>05</b>         |
| <b>Q.3</b>  | (a) | Classify antineoplastic agents and write a note on methotrexate.  | <b>06</b>         |
|             | (b) | Explain the detail pharmacology of isoniazid as an antitubercular drug.   | <b>05</b>         |
|             | (c) | Classify the antifungal agents and discuss the pharmacology of fluconazole in brief.  | <b>05</b>         |
| <b>Q.4</b>  | (a) | Classify oral hypoglycemic agents. Explain the mechanism of action, pharmacokinetic and adverse effect of Biguanides class of drug. | <b>06</b>         |
|             | (b) | Write a note on gonadotropins.  | <b>05</b>         |
|             | (c) | Discuss the biosynthesis, storage, metabolism and regulation of thyroid hormone.  | <b>05</b>         |
| <b>Q.5</b>  | (a) | Explain the mechanism of action, pharmacological actions, adverse effect and uses of glucocorticoids.                               | <b>06</b>         |
|             | (b) | Write a note on oral contraceptives.  | <b>05</b>         |
|             | (c) | Explain oxytocic in brief.  | <b>05</b>         |
| <b>Q. 6</b> | (a) | Classify anti-asthmatics drugs. Explain mechanism of action, pharmacological action of methyl xanthines derivatives.                | <b>06</b>         |
|             | (b) | Discuss proton pump inhibitors in brief.  | <b>05</b>         |
|             | (c) | Explain the oral rehydration salt in detail.  | <b>05</b>         |
| <b>Q.7</b>  | (a) | Classify immunosuppressant drugs and explain any one drug in detail.  | <b>06</b>         |
|             | (b) | Explain the biosynthesis and physiological actions of nitric oxide.   | <b>05</b>         |
|             | (c) | Define following terminologies:   | <b>05</b>         |
|             | i)  | Chemotherapeutic index.   |                   |
|             | ii) | Antibiotics   | iii) Laxative     |
|             | iv) | Purgative   | v) Bacteriostatic |