Seat No.: _____ Enrolment No._____

# GUJARAT TECHNOLOGICAL UNIVERSITY

**B. Pharm. – SEMESTER – VII • EXAMINATION – WINTER 2013**

**Subject Code: 270003** **Date: 30-11-2013**

**Subject Name: Pharmaceutical Chemistry-IX (Medicinal Chemistry)**

**Time: 10.30 am - 01.30 pm** **Total Marks: 80**

**Instructions:**

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

| | | | |
|---|---|---|---|
| **Q.1** | (a) | What are hormones? Discuss nomenclature and stereochemistry of steroids. | **06** |
| | (b) | Define and classify antifungal agents. Write a note on azole derivatives used as antifungals. | **05** |
| | (c) | Discuss the chemistry of macrolide antibiotics. | **05** |
| **Q.2** | (a) | Write a note on immunosupressants | **06** |
| | (b) | Write down SAR of quinolones as antibacteirals | **05** |
| | (c) | Write synthesis of chloramphenicol and ciprofloxacin | **05** |
| **Q.3** | (a) | Discuss degradation of penicillin in detail | **06** |
| | (b) | Write down SAR of tetracyclines | **05** |
| | (c) | Write a note on short acting sulfonamides | **05** |
| **Q.4** | (a) | Discuss insulin and its preparations | **06** |
| | (b) | Write synthesis of chloroquine and mebendazole | **05** |
| | (c) | Classify anti-HIV agents and write a note on reverse transcriptase inhibitors | **05** |
| **Q.5** | (a) | Discuss about first line antituberculer agents | **06** |
| | (b) | Discuss the chemistry and SAR of estrogens | **05** |
| | (c) | Write synthesis of tolbutamide and isoniazid | **05** |
| **Q. 6** | (a) | Classify antiamoebic agents and discuss any one class in detail | **06** |
| | (b) | Write synthesis of sulphacetamide and clotrimazole | **05** |
| | (c) | Write a note on antithyroid drugs | **05** |
| **Q. 7** | (a) | Classify anticancer agents and write about any one class in detail | **06** |
| | (b) | Write synthesis of methotrexate and amantadine | **05** |
| | (c) | Write a note on third and fourth generation cephalosporins | **05** |

**********