

**GUJARAT TECHNOLOGICAL UNIVERSITY****M. Pharm. – SEMESTER – I • EXAMINATION – SUMMER • 2015****Subject Code: 910203****Date: 25-05-2015****Subject Name: Advances in Pharmacology****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.

- Q.1** (a) Classify adrenoceptor antagonists. Explain the role of  $\beta_3$  adrenoceptors in various diseases. **06**
- (b) Explain in brief about biochemical mechanisms of resistance to antibiotics. **05**
- (c) Write a note on therapeutic uses of cholinesterase inhibitors. **05**
- Q.2** (a) Enlist 5-HT receptor types and their agonists and antagonists. Explain pharmacotherapeutics of 5-HT receptor antagonists. **06**
- (b) Explain pharmacological actions, adverse effects and therapeutic uses of antihistaminic drugs. **05**
- (c) Write a note on pharmacology of neuromuscular blockers. **05**
- Q.3** (a) Classify eicosanoids. Discuss clinical applications of eicosanoids by giving suitable examples. **06**
- (b) Explain in brief about cholinergic receptors, their sites, agonists and antagonists. **05**
- (c) Write pharmacology of broad spectrum antifungal agents in detail. **05**
- Q.4** (a) Classify semisynthetic penicillin. Explain antimicrobial spectrum and therapeutic indications of Aminopenicillin. **06**
- (b) Explain in brief about pharmacotherapy of tuberculosis. **05**
- (c) Write a mechanism of action and therapeutic uses of Co-trimoxazole. **05**
- Q.5** (a) Enlist various hormone antagonists used in cancer chemotherapy. Write a note on tamoxifen. **06**
- (b) Discuss mechanism of action and therapeutic uses of clofazimine. **05**
- (c) Write a note on current approaches in the management of sexually transmitted disease. **05**
- Q. 6** (a) Classify antimalarial drugs. Discuss in brief about recent advances for the treatment of Malaria. **06**
- (b) Discuss pharmacotherapy of AIDS in detail. **05**
- (c) Write in detail about mechanism of action, therapeutic uses and adverse effects of Tetracycline. **05**
- Q.7** (a) Write mechanism of action of: **06**
- i) Levofloxacin      ii) Cefixime      iii) Metronidazole
- (b) Explain mechanism of action, mechanism of resistance and toxicities of Aminoglycoside antibiotics. **05**
- (c) Write a note on role of Immunomodulators in various disorders. **05**