

GUJARAT TECHNOLOGICAL UNIVERSITY
M. PHARM. - SEMESTER – I • EXAMINATION – WINTER 2012

Subject code: 910203**Date: 11/01/2013****Subject Name: Advances in Pharmacology****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.**

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| Q.1 | (a) | Write adrenergic receptor agonists and antagonists with their therapeutic uses. | 06 |
| | (b) | What is Glaucoma? Give recent advances in pharmacotherapy of Glaucoma. | 05 |
| | (c) | Write clinical applications and adverse effects of serotonin agonists. | 05 |
| Q.2 | (a) | Mention reversible cholinesterase inhibitors and write their therapeutic uses and side effects. | 06 |
| | (b) | Classify anti-fungal drugs and describe in detail about Azoles. | 05 |
| | (c) | Discuss the current approaches in the management of Lower respiratory tract infection. | 05 |
| Q.3 | (a) | Write a note on immunosuppressants with their therapeutic indications along with adverse effects. | 06 |
| | (b) | Give the mechanism of action of: | 05 |
| | | i. Tizanidine in multiple sclerosis | |
| | | ii. Sibutramine as appetite suppressants | |
| | | iii. Methyldopa in hypertension | |
| | | iv. Dantrolene sodium in spastic cerebral palsy | |
| | | v. Ergotamine in migraine | |
| | (c) | Write a note on advances in pharmacotherapy of tuberculosis. | 05 |
| Q.4 | (a) | Give a diagrammatic representation of the synthesis of eicosanoids. Describe the therapeutic applications of prostaglandins. | 06 |
| | (b) | Explain Growth factor analogs as synthetic antimicrobial drugs. | 05 |
| | (c) | Describe the pharmacological actions and therapeutic uses of non- depolarizing skeletal muscle relaxants. | 05 |
| Q.5 | (a) | Enumerate Tetracyclines. Outline their mechanism of action, therapeutic uses and adverse effects. | 06 |
| | (b) | Explain why - | 05 |
| | | I. Propranolol is misused by pistol marksmen and snooker players. | |
| | | II. Clavulanic acid combined with amoxicillin. | |
| | | III. Atropine substitutes are used in drug induced Parkinsonism. | |
| | | IV. Adrenaline is the drug of choice in anaphylactic shock. | |
| | | V. Ethambutol is best avoided in children. | |
| | (c) | Discuss the principles of safe and effective antibacterial drug therapy. | 05 |
| Q. 6 | (a) | Define antimicrobial resistance and discuss methods for its prevention. | 06 |
| | (b) | Write a brief note on Natural products as anticancer drugs. | 05 |
| | (c) | Enumerate semi synthetic penicillins. Give their therapeutic uses. | 05 |
| Q.7 | (a) | Discuss the current approaches in the management of sexually transmitted disease. | 06 |
| | (b) | List indications of Metronidazole. Specify the condition where it is combined with diloxanide furoate. What is the rationale for the combination? | 05 |
| | (c) | Classify Antihistamines. Write the pharmacological actions and therapeutic uses of H1-receptor antagonists. | 05 |