

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM. - SEMESTER-VII • EXAMINATION – SUMMER - 2017

Subject Code: 2270004**Date: 05/05/2017****Subject Name: Pharmacology and Pharmacotherapeutics - 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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| Q.1 | (a) Classify semisynthetic penicillins. Discuss pharmacology of ampicillin. | 06 |
| | (b) Explain mechanism of action and toxic effects of Aminoglycoside antibiotics. | 05 |
| | (c) Write advantages and disadvantages of antimicrobial drug combinations. | 05 |
| Q.2 | (a) Classify antimicrobial agents based on mechanism of action. Explain various mechanisms of drug resistance with suitable examples. | 06 |
| | (b) Discuss etiologic factors, diagnosis and therapeutic management of breast cancer. | 05 |
| | (c) Write causative agents and management of enteric infections. | 05 |
| Q.3 | (a) Write mechanism of action and uses of followings;
i) Terbinafine, ii) Oseltamivir, iii) Paclitaxel, iv) Aztreonam, v) Levofloxacin, vi) Pyrazinamide | 06 |
| | (b) Discuss antibacterial spectrum, pharmacokinetics, adverse effects and uses of Erythromycin. | 05 |
| | (c) Classify sulphonamides. Describe mechanism of action and uses of Cotrimoxazole. | 05 |
| Q.4 | (a) Discuss adverse effects of Chloramphenicol and Tetracycline. | 06 |
| | (b) Classify anticancer agents. Explain mechanism of action and uses of vinca alkaloids. | 05 |
| | (c) Write a detailed note on beta-lactamase inhibitors. | 05 |
| Q.5 | (a) Write causative agents, mode of transmission, diagnosis and treatment of followings;
i) Leishmaniasis ii) Malaria | 06 |
| | (b) Classify antiviral agents. Write mechanism of action, adverse effects and therapeutic uses of Acyclovir. | 05 |
| | (c) Explain Etiology, signs and symptoms, diagnosis and pharmacotherapeutic management of tuberculosis. | 05 |
| Q.6 | (a) Classify cephalosporins. Describe antibacterial spectrum and therapeutic uses of third generation cephalosporins. | 06 |
| | (b) Explain differences between bird flu and swine flu with respect to etiology, mode of transmission, clinical features and diagnosis. | 05 |
| | (c) Write a note on anthelmintic agents. | 05 |
| Q.7 | (a) Discuss pathophysiology, symptoms, diagnosis and management of AIDS. | 06 |
| | (b) Classify antifungal drugs based on mechanism of action. Discuss anti-fungal spectrum, adverse effects, and therapeutic uses of Fluconazole. | 05 |
| | (c) Justify following comments; | 05 |
| | a) Zidovudine and Stavudine should not be used in combination. | |
| | b) Pyridoxine should be given prophylactically with higher doses of isoniazide. | |
| | c) Antimicrobial agents have selective toxicity. | |
| | d) Sulphonamides are associated with kernicterus if administered in newborns. | |
| | e) Anticancer agents may cause granulocytopenia. | |