

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;
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. | 05 |