

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. – SEMESTER – IV • EXAMINATION – SUMMER • 2015

Subject Code: 2240005**Date: 05-06-2015****Subject Name: Basic Concepts of Pharmacology and Clinical Pharmacy Practice****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 a note on various routes of administration of drug. | 06 |
| | (b) Explain the dose response relationship. | 05 |
| | (c) Write a note on various sources of drugs. | 05 |
| Q.2 | (a) Classify bio-transformation reactions of the drugs. Add a note on non-synthetic reactions. | 06 |
| | (b) Write a note on factors modifying drug action. | 05 |
| | (c) Write a note on combined effect of drugs. | 05 |
| Q.3 | (a) Write a note on G-protein coupled receptors with major effector pathways. | 06 |
| | (b) Explain various transport mechanisms of drug across the biological membrane. | 05 |
| | (c) Explain the following terminology in brief | 05 |
| | i) Pharmacokinetics | |
| | ii) Pharmacoepidemiology | |
| | iii) Carcinogenicity | |
| | iv) Drug dependence | |
| | v) Iatrogenic effects | |
| Q.4 | (a) Define and classify drug-drug interactions. | 06 |
| | (b) Write a note on competitive and non-competitive antagonism. | 05 |
| | (c) Write a note on rational use of medicines. | 05 |
| Q.5 | (a) Define absorption of drug. Explain the factors affecting absorption. | 06 |
| | (b) Explain the bioavailability of the drug and bioequivalence drugs. | 05 |
| | (c) Write a note on therapeutic drug monitoring and its significance. | 05 |
| Q.6 | (a) Define Patient counseling. Explain goals and functions of patient counseling. | 06 |
| | (b) Explain the word medication adherence. Write a note on importance of medication adherence. | 05 |
| | (c) Write a note on drug information centre. | 05 |
| Q.7 | (a) Write a note on key elements for communication skills for effective counseling. | 06 |
| | (b) Enumerate and explain various steps for patient counseling. | 05 |
| | (c) Write a note on medication errors. | 05 |