Seat No.: _____   Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm. - SEMESTER–IV • EXAMINATION – SUMMER-2016

Subject Code:2240005   **Date: 03/06/2016**
Subject Name: Basic Concepts of Pharmacology and Clinical Pharmacy Practice
Time: 10:30 AM to 1:30 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 the route of drug administration and describe in detail sublingual route of drug administration.	**06**
	(b)	Define following term	**05**
		i) Pharmacodynamic	
		ii) Pharmacogenomics	
		iii) Pharmacokinetics	
		iv) Drug tolerance	
		v) Pharmacology	
	(c)	Write a short note on scope of pharmacology and clinical pharmacy.	**05**
Q.2	**(a)**	Classify various type of drug transport mechanism across the cell membrane and describe in detail active transport mechanism.	**06**
	(b)	Write a short note on plasma protein binding.	**05**
	(c)	Which are the various factors affecting drug dose selection during pediatric and geriatric patients.	**05**
Q.3	**(a)**	Write a short note on therapeutic drug monitoring and its significance.	**06**
	(b)	Write short note on bioavailability.	**05**
	(c)	Write a short note BBB	**05**
Q.4	**(a)**	Classify various type of receptor and decribe in detail GPCR.	**06**
	(b)	Define following terms with example	**05**
		i) Potentiation	
		ii) Addition	
		iii) Synergism	
		iv) Agonist	
		v) Partial antagonist	
	(c)	Differentiate: Competitive antagonism and Non competitive antagonism.	**05**
Q.5	**(a)**	Classify the various types of Drug interaction and describe in detail pharmacokinetic interaction.	**06**
	(b)	Write a short on rational use of drug.	**05**
	(c)	Write a short note on microsomal enzyme induction.	**05**
Q. 6	**(a)**	Write a short note on pharmacokinetic type of ADR.	**06**
	(b)	Write a short note on drug nomenclature	**05**
	(c)	Write a short note on volume of distribution.	**05**
Q.7	**(a)**	Write a short note on biotransformation.	**06**
	(b)	Write a short note on essential drugs.	**05**
	(c)	Write a short note on teratogenicity.	**05**

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