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Seat No.:	Enrolment No.
Deal NO	Emoniem No.

Subject Code: 2240005

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

B. Pharm. – SEMESTER – I • EXAMINATION – SUMMER • 2014

Date: 29-05-2014

	ŭ	ct Name: Basic Concepts of Pharmacology and Clinical Pharmacy Practice 02:30 pm - 05:30 pm Total Marks: 80 ctions: 1. Attempt any five questions. 2. Make suitable assumptions wherever necessary. 3. Figures to the right indicate full marks.	
Q.1	(a)	Define Pharmacology. Discuss the scope of pharmacology and clinical pharmacy.	06
	(b) (c)	Discuss the disadvantages of oral and local route of drug administration.  Define following terms: 1. Pharmacokinetics 2. Tachyphylaxis 3. Chemotherapy 4. Plasma half-life 5. Drug tolerance	05 05
Q.2	(a)	Write a short note on  1. Plasma protein binding 2. Significance of Phase I and Phase II metabolism.	06
	<b>(b)</b>	What do you understand by apparent volume of distribution? Explain the factors which affect the drug distribution.	05
	(c)	Give the advantages and disadvantages of intravenous route of drug administration.	05
Q.3	(a)	Define bioavailability. Explain the term biological half-life and give its importance.	06
	(b) (c)	Define antagonist. Differentiate competitive and non-competitive antagonism. Write in brief the gating and signal transduction mechanisms of G-protein coupled receptors.	05 05
Q.4	(a)	Explain in brief adverse drug reactions. Classify ADRs as per Rawlins-	06
	<b>(b)</b>	Thompson system with suitable example. Write a note on Essential drugs.	05
0.5	(c)	Discuss the importance of Drug and Poison information center.	05
Q.5	(a)	Discuss in detail about the method and importance of effective Patient counselling.	06
	(b) (c)	Discuss about various pharmacokinetic interactions with example.  Describe the role of Standard treatment guideline in promoting the rational use of drug.	05 05
Q. 6	(a)	Discuss the following terms with example:	06
	<b>(b)</b>	1. Mutagenicity 2. Teratogenicity 3. carcinogenicity Discuss the importance of pharmacovigilance in preventing the drug	05
	(c)	interactions and adverse drug reactions.  Write a note on medication non-adherence.	05
Q.7	(a)	Write in brief how pharmacokinetic factors affect the dose selection in pediatric	06
	(b) (c)	or geriatric patients.  What are the various considerations for drug prescribing during pregnancy?  Describe the following terminologies using dose response curve.  (i) Drug selectivity (ii) Risk-benefit ratio (iii) Drug potency (iv) Drug efficacy	05 05

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