Seat No	o.:	Enrolment No.		
	G	UJARAT TECHNOLOGICAL UNIVERSITY		
	M. P	harm. – SEMESTER – I • EXAMINATION – SUMMER • 2015		
Subject Code: 910102 Date: 21-0			5-2015	
Subjec	ct Nar	ne: Pharmaceutical Formulation		
		Development and Biopharmaceutics		
Time: 02:30 pm - 05:30 pm Total Mark			80	
Instruc				
		tempt any five questions.		
		ake suitable assumptions wherever necessary. Tures to the right indicate full marks.		
•	J. Fig	utes to the right indicate rull marks.		
Q.1	(a)	Discuss compaction properties and its importance.	06	
_	(b)	Discuss particle size and particle size distribution in pre-formulation	05	
		study.		
	(c)	Give rationale for selecting the preferred polymorph.	05	
Q.2	(a)	Discuss drug-excipient compatibility study and methods of its	06	
Q. <u>2</u>	(a)	determination.	vv	
	(b)	Discuss selection of dissolution medium and conditions.	05	
	(c)	Write Winsor's theory of solubilization.	05	
0.3	()		0.0	
Q.3	(a)	Enumerate techniques for improvement in drug solubilization and discuss any one in details.	06	
	(b)	Discuss importance of accelerated stability study.	05	
	(c)	Discuss objectives of dissolution study and dissolution equipment	05	
		for floating tablets.		
Q.4	(a)	Give applications of microcalorimetry in stability study. Discuss method of studying bioavailability and bioequivalence.	06 05	
	(b) (c)	Discuss the general regulatory requirements of stability testing.	05	
	(0)	Discuss the general regulatory requirements of statistics testing.	0.0	
Q.5	(a)	Discuss similarity and dissimilarity factors with examples.	06	
	(b)	Discuss importance of volume of distribution and plasma protein	05	
	(-)	binding.	0.5	
	(c)	How shampoo is evaluated?	05	
Q. 6	(a)	Discuss basic concept and importance of biological half-life.	06	
<u> </u>	(b)	Give importance of cancer cell lines as in vitro models in cancer.	05	
	(c)	Give bioequivalence study requirements.	05	
0.7	(a)	Discuss kinetics of two commentment and del	0.	
Q.7	(a)	Discuss kinetics of two compartment model.	06	
	(b)	Discuss factors affecting IVIVC.	05	
	(c)	Write note on herbal products for face.	05	
