Enrollment No:	Exam Seat No:
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C.U.SHAH UNIVERSITY

Winter Examination-2018

Subject Name: Pharmaceutical Dosage Form Design I

Subject Code: 4PS07DFD1 Branch: B.Pharm

Semester: 7 Date: 29/11/2018 Time: 10:30 To 1:30 Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
- (2) Instructions written on main answer book are strictly to be obeyed.
- (3) Draw neat diagrams and figures (if necessary) at right places.
- (4) Assume suitable data if needed.

Q-1			(14)
C –		Define Following:	
	a)	Amorphous compounds	01
	b)	Carboxylation	01
	c)	Antioxidants	01
	d)	Log P	01
	e)	Ionization constant	01
	f)	Pseudo first order reaction	01
	g)	Biopharmaceutics	01
	h)	Absorption	01
	i)	Distribution	01
	j)	Metabolism	01
	k)	Excretion	01
	1)	Bioavailability	01
	m)	Bioequivalence	01
	n)	Intrinsic Dissolution Rate	01

Attempt any four questions from Q-2 to Q-8

Q-2		Attempt all questions	(14)
	a)	Explain the role of Polymorphism and solubility in Preformulation.	07
	b)	Write a note on Drug-Excipient compatibility studies.	07
Q-3		Attempt all questions	(14)
	a)	Explain Dissolution profile comparison using similarity & dissimilarity factor.	07
	b)	Write a note on enteric polymers used for controlled release pharmaceutical	07



formulations.

Q-4		Attempt all questions	(14)
	a)	Describe the chemical degradation of drugs via hydrolysis and its stabilization	07
	b)	techniques. Explain the methods to determine order of reaction.	07
0.5		Attempt all questions	(14)
Q-5	۵)	Explain Accelerated stability study with its limitations.	07
	a)		
	b)	Discuss Matrixing and Bracketing Techniques for stability study.	07
Q-6		Attempt all questions	(14)
~ "	a)	Enlist various mechanisms of drug transport. Discus passive diffusion in detail.	07
	b)	Enumerate the factors affecting absorption of drug. Discuss any two	07
	D)	physicochemical properties of drug that affect the absorption of drug.	07
Q-7		Attempt all questions	(14)
Q '	a)	Enlist methods of measurement of bioavailability. Discuss the pharmacokinetic	07
	a)	methods for the bioavailability measurement.	U1
	b)	Explain Cmax, Tmax and AUC with its significance.	07
	D)	Explain Chiax, Thiax and ACC with its significance.	U/
Q-8		Attempt all questions	(14)
	a)	Write a note on BCS classification system.	07
	b)	Enumerate various dissolution apparatus. Describe any one in detail with labeled	07
	D)	diagram.	07

