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

Winter Examination-2022

Subject Name : Pharmaceutical Dosage Form Design I

Subject Code: 4PS07DFD1 Branch: B.Pharm

Semester: 7 Date: 22/11/2022 Time: 11:00 To 02:00 Marks: 70

Instructions:

a)

b)

- (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			Define the following terms:	(14)
		a)	Preformulation	(1)
		b)	Solvate	(1)
		c)	Partition co-efficient	(1)
		ď)	Isomerization	(1)
		e)	Photolysis	(1)
		f)	Autooxidation	(1)
		g)	C_{\max}	(1)
		h)	Relative bioavailability	(1)
		i)	Pharmacodynamics	(1)
		.j)	Shelf life	(1)
		k)	Overage	(1)
		l)	Order of reaction	(1)
		m)	Bio-degradable polymers	(1)
		n)	Intrinsic dissolution	(1)
Atter	npt an	y foui	questions from Q-2 to Q-8	
Q-2			Attempt all questions	(14)
	a)		Write the objectives of preformulation? What is the importance of polymorphs	(7)
	,		in preformulation?	()
	b)		Explain the effect of salt formation and racemization in Preformulation.	(7)
Q-3			Attempt all questions	(14)
	a)		Enumerate bulk characterization parameters. Explain any one in detail.	(7)
	b)		Describe drug-excipient compatibility study of pharmaceutical product.	(7)
0-4			Attempt all questions	(14)

(7)

(7)

Discuss plasma protein drug binding.

Write a note on common ion effect.



Q-5	Attempt all questions	(14)
a)	Describe in detail preservatives.	(7)
b)	Describe matrixing and bracketing in stability study.	(7)
Q-6	Attempt all questions	(14)
a)	Describe the various methods to prevent the dosages from hydrolysis.	(7)
b)	Explain accelerated stability studies.	(7)
Q-7	Attempt all questions	(14)
a)	Describe Latin Square cross over design for bioequivalence study.	(7)
b)	Explain the factors affecting renal excretion.	(7)
Q-8	Attempt all questions	(14)
a)	Write a note on similarity factor and dissimilarity factor.	(7)
b)	Explain USP dissolution apparatus IV with diagram.	(7)