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

## Winter Examination-2019

**Subject Name: Modern Pharmaceutics** 

Subject Code: MPH103T Branch: M.Pharm (Pharmaceutics)
Semester: 1 Date: 04/12/2019 Time: 02:30 To 05:30 Marks: 75

## **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.

_	(+)	Assume suitable data if needed.	
Q-1		Define the following:	(20)
	a)	QTPP	
	<b>b</b> )	CQA	
	c)	DoE	
	d)	Design Space	
	e)	Common ion effect	
	<b>f</b> )	RLD	
	<b>g</b> )	Higuchi and Peppas plot	
	h)	Calibration	
	i)	ANOVA test	
	<b>j</b> )	Consolidation	
Attem	pt the f	Collowing questions:	
Q-2		Attempt any two of following:	(20)
	$\mathbf{A}$	Write Classification of optimization techniques and explain any one	10
		technique with example.	
	В	Discuss the applications of DTA, DSC, FTIR in drug excipient compatibility	10
		study with suitable examples	
	$\mathbf{C}$	Explain design qualification, installation qualification and explain under what	10
		conditions you will perform requalification of equipment.	
Q-3		Attempt any Seven of following:	(35)
	$\mathbf{A}$	Describe in detail calibration master plan.	5
	В	Discuss the principles of plant layout and construction with reference to	5
		manufacture of tablet dosage form giving labeled plan diagram	
	$\mathbf{C}$	Discuss the objectives of production planning and materials control	5
	D	Give techniques of inventory control	5
	$\mathbf{E}$	Discuss Comparison of dissolution profile by model independent methods	5
	${f F}$	Describe the Kawakita and Heckle equations in regard to compression	5
	$\mathbf{G}$	Write a brief note on total quality management.	5 5
	H	Describe the physics of tablet compression.	5
	I	Write a brief note on Linearity Concept of significance	5

