

Enrollment No: _____ Exam Seat No: _____

C.U.SHAH UNIVERSITY

Summer Examination-2017

Subject Name: Pharmaceutical Industrial Process I

Subject Code: 4PS02PIP1

Branch: B.Pharm

Semester: 2

Date: 02/05/2017

Time: 02:00 To 05:00

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.
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Q-1	Define following:	(14)
	a) Size reduction	01
	b) Size separation	01
	c) Crystallization	01
	d) Mixing	01
	e) Filtration	01
	f) Centrifugation	01
	g) Extraction	01
	h) Crystal Form	01
	i) Crystal Habit	01
	j) Angle of repose	01
	k) Hausner ratio	01
	l) Carr's Index	01
	m) Menstrum	01
	n) Marc	01

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

Q-2	Attempt all questions	(14)
	a) Discuss in detail about ball mill.	05
	b) Describe the mechanism of size reduction process.	05
	c) Give the objectives of size reduction.	04



Q-3	Attempt all questions	(14)
a)	Describe the standards for the sieve and standards for the powders.	07
b)	Enumerate the method of size separation. Explain any two methods.	07
Q-4	Attempt all questions	(14)
a)	Discuss the mechanism of solid-solid, solid-liquid and liquid-liquid mixing.	07
b)	Classify the mixers. Explain any one mixer for semi-solid mixing.	07
Q-5	Attempt all questions	(14)
a)	Discuss the mechanism of crystallization.	07
b)	Enumerate crystallizers. Explain any one in detail.	07
Q-6	Attempt all questions	(14)
a)	Write a note on filter aids and filter media.	07
b)	Enumerate filters. Explain any one in detail.	07
Q-7	Attempt all questions	(14)
a)	Write a note on solvents used for extraction.	07
b)	Discuss in detail about percolation method.	07
Q-8	Attempt all questions	(14)
a)	Discuss the principle and theory of centrifugation.	07
b)	Write a note on fire hazards and safety precaution.	07

