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

## **Summer Examination-2019**

Subject Name: Pharmaceutical Industrial Process I

**Subject Code:** 4PS02PIP1 **Branch:**B.Pharm

Semester: 2 Date: 16/04/2019 Time: 02:30 To 05:30 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		Attempt the following questions:	(14)
	a)	Write two objectives of Size reduction.	(1)
	<b>b</b> )	Explain briefly principle of hammer mill.	(1)
	c)	Define the term 'Diffusive mixing'.	(1)
	<b>d</b> )	Write two applications of Fluid energy mill in pharmacy.	(1)
	<b>e</b> )	Define the term 'Crystal hydrates'.	(1)
	<b>f</b> )	Explain briefly principle of cyclone separator.	(1)
	<b>g</b> )	Name two instruments used for liquid-liquid mixing.	(1)
	<b>h</b> )	Write two uses of double cone blender.	(1)
	i)	Explain briefly 'Crystallization'.	(1)
	j)	Write difference between Filtration and Clarification.	(1)
	<b>k</b> )	Define Habit.	(1)
	1)	Write two applications of Centrifugation in pharmacy.	(1)
	m)	Explain the term briefly 'Decoction'.	(1)
	n)	Define the term 'Menstruum'.	(1)
Attem	npt anv f	our questions from Q-2 to Q-8	
Q-2		Attempt all questions:	(14)
<b>C</b> –	a	Write principle, construction and working of Ball mill.	(7)
	b	Explain Colloid mill with the help of suitable diagram	(7)
Q-3		Attempt all questions:	(14)
Q U	a	Describe theories for energy requirement in size reduction.	(7)
	b	Describe pharmacopoeial standards for sieves as per I.P.	(7)
Q-4		Attempt all questions:	(14)
ν.	a	Describe the principle, construction, working, advantages and disadvantages of Silverson mixer.	(7)
	b	Explain the construction, working and uses of Planetary motion mixer.	(7)

Q-5		Attempt all questions:	(14)
	a	Explain the construction and working of filter-press.	(7)
	b	Write differences between surface filtration and depth filtration.	(7)
Q-6		Attempt all questions:	(14)
	a	Explain Swenson Walker Crystallizer with the help of suitable diagram.	(7)
	b	Write a note on Mier's supersaturation theory.	(7)
Q-7		Attempt all questions:	(14)
-	a	Describe Soxhlet apparatus for extraction.	(7)
	b	Differentiate between: Maceration and Percolation.	(7)
Q-8		Attempt all questions:	(14)
	a	Explain the construction, working, advantages and disadvantages of perforated	(7)
		basket centrifuge.	
	b	Write a note on chemical hazards and its precaution.	(7)



