C.U.SHAH UNIVERSITY
Summer-2015

Subject Code:4PS01FPI1   **Subject Name: Fundamentals of Pharmaceutical Industry**
Course Name:B.Pharm.   Date :4/5/2015
Semester:1   Marks: 70
                                                                          Time:10:30 To 01:30
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Instructions:
1) Attempt all Questions of both sections in same answer book/Supplementary.
2) Use of Programmable calculator & any other electronic instrument prohibited.
3) Instructions written on main answer book are strictly to be obeyed.
4) Draw neat diagrams & figures (if necessary) at right places.
5) Assume suitable & perfect data if needed.

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Q1.	A. Compare and contrast Orifice meter and Ventury meter.	7
	B. Why do we use steam as heating media in Pharmaceutical industry?	7

Attempt Any Four.

Q2.	Explain the Fourier's Law	7
	Describe the steam traps	7
Q3.	A. What is Reynolds number? Show how it is dimensionless. What is its significance in fluid flow?	7
	B. Explain the energy losses that occur when a fluid flow through a pipe.	7
Q4	A. Derive Bernoulli's equation.	7
	B. What is Manometer? Derive equation applicable for simple manometer.	7
Q5	A. Classify the materials used for pharmaceutical plant construction. Discuss advantages and limitation of different kind of plastics used in pharmaceutical industry.	7
	B. Discuss various factors affecting selection of material of pharmaceutical plant construction.	7
Q6	A. Define the term tie substance. A salt solution originally contains 4% by weight NaCl in water is evaporated to 5% by weight NaCl. (NaCl is a tie substance) What percentage of water evaporated? What is the reduction in original solution?	7
	B. Describe about Belt conveyor and Pneumatic conveyor	7
Q7	A. Define Corrosion. How it will be prevented? Describe in brief.	7
	B. What is Valve and Pump? Classify valve and pump. Write a short note on centrifugal pump and globe valve.	7

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