

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 3 EXAMINATION – WINTER -2019

Subject Code: 2230002**Date: 19-11-2019****Subject Name: Pharmaceutical Engineering****Time: 10:30AM TO 01:30PM****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1	(a) Classify the types of fluid flow & Explain Reynold's number.	06
	(b) Discuss the experiment of Orifice meter.	05
	(c) Write a note on Transportation of fluids.	05
Q.2	(a) Explain Bernoulli's Theorem in detail.	06
	(b) Derive corollary of Dalton's law and Amagat's law.	05
	(c) Enlist different types of valve. Describe check valve.	05
Q.3	(a) Explain heat transfer by forced convection in laminar and turbulent flow.	06
	(b) Discuss the applications of gas laws.	05
	(c) Explain briefly Bucket type steam trap.	05
Q.4	(a) Differentiate Venturimeter and Rotameter.	06
	(b) Write the applications of heat transfer.	05
	(c) What is Radiation-Black body? Differentiate Absorptivity & Emmisivity.	05
Q.5	(a) Write a short note on Solid mass transfer.	06
	(b) Describe with diagram Centrifugal pump.	05
	(c) Explain briefly study of steam table.	05
Q. 6	(a) Discuss the method for Liquid handling.	06
	(b) Explain Colour coding Pipelines in Material Handling system.	05
	(c) Write the general principles of Stoichiometry? Explain Tie substances.	05
Q.7	(a) Write a short note: Corrosion.	06
	(b) Discuss the Concept of boundary layers.	05
	(c) Explain basic equations of fluid flow.	05
