

GUJARAT TECHNOLOGICAL UNIVERSITY
B.Ph. – SEMESTER III– • EXAMINATION – SUMMER -2018

Subject Code:2230002**Date: 02/05/2018****Subject Name: Pharmaceutical Engineering****Time: 02:30PM TO 05:30PM****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 manometer. Discuss U-tube manometer in detail	06
	(b) Define tie substance, heat capacity and steady state.	05
	(c) Discuss importance of stoichiometry in pharmacy.	05
Q.2	(a) What are applications of pharmaceutical engineering?	06
	(b) Write a note on analysis of fuels.	05
	(c) Give a brief note on types of pressures and their measurement.	05
Q.3	(a) Write a note on gas laws with their assumptions.	06
	(b) Write a note on belt conveyer.	05
	(c) Discuss different mechanisms of fluid flow.	05
Q.4	(a) Classify flow meters. Describe any one with labelled diagram.	06
	(b) What are different means of interplant and intraplant transportation?	05
	(c) Enlist types of joints. Write functions of fitting and joints for pipe.	05
Q.5	(a) Write a note on steam as a heating medium.	06
	(b) Discuss different mechanisms of heat transfer.	05
	(c) Discuss theories of mass transfer.	05
Q. 6	(a) Classify heat exchangers. Write a note on any one of it.	06
	(b) Write a brief note on physical factors affecting selection of material of plant construction.	05
	(c) Discuss electrochemical theory of corrosion.	05
Q.7	(a) Classify pumps and discuss reciprocating positive displacement pumps.	06
	(b) Enlist factors affecting storage conditions and techniques used for storage of material.	05
	(c) Write a note on energy losses in fluid flow.	05
