Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – I • EXAMINATION – SUMMER 2013			
Subject C	ode: 9	Date: 15-05-2013	
		Industrial Pharmacy-I	
		- 01.30 pm Total Marks: 80	
Instructions			
2. N	Aake si	t any five questions. uitable assumptions wherever necessary. to the right indicate full marks.	
0.1	(a)	Explain the role of HVAC system in phermacoutical plant	06
Q.1	(a) (b)	Explain the role of HVAC system in pharmaceutical plant Write a note on personal facilities in pharmaceutical industry	05
	(c)	Enlist the factors to be considered while selecting a site for	05
	(5)	Pharmaceutical Plant	
Q.2	(a)	Describe the departmental layout for liquid oral dosage form	06
	(b)	Enlist equipments required in the manufacture of solid, liquid and	05
	()	parenteral dosage form at pilot level	0.5
	(c)	Discuss the factors affecting equipment design in pharmaceutical plant	05
Q.3	(a)	Write a note on schedule M for tablet manufacturing unit	06
	(b)	Enlist equipments require for manufacturing of semisolid dosage	05
		forms and discuss any one in detail	
	(c)	Describe operating principal of bi-layer rotary tablet machine	05
Q.4	(a)	Explain BMR with suitable examples	06
	(b)	Explain validation protocol and its contents	05
	(c)	Explain validation of rapid mixer granulator	05
Q.5	(a)	What is important of Standard operating procedure? Write Standard	06
	(1.)	operating procedure for dissolution test apparatus	0.5
	(b)	Explain standard operating procedure for granulation process at production level	05
	(c)	Explain in Process quality control test for sterile dosage forms	05
	(0)	Explain in Trocess quanty control test for sterile dosage forms	0.5
Q. 6	(a)	Explain importance of GMP in pharmaceutical industry	06
	(b)	Explain production planning for tablet manufacturing	05
	(c)	What is importance of materials control in Pharmaceutical industry	05
Q.7	(a)	Explain Manufacturing steps and control condition require for formulate sterile dosage form	06
	(b)	Explain primary and secondary packaging materials	05
	(c)	Write a note on Scrap disposal procedure and records	05
