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Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B. Pharm. – SEMESTER – VII • EXAMINATION – SUMMER 2013

	•	Code: 270002 Date: 14-05-2013	
Tin	-	Name: Pharmaceutical Technology- I 2.30 am - 05.30 pm Total Marks: 80 ns:	
	1. 2. 3.	Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b) (c)	Write a brief note on 1. Emulsifying agents 2. Suspending agents Enlist the ideal characteristics of suspension. Comment on "Flocculated suspension is an ideal suspension." Write a short note on vehicles & solvents used in liquid dosage forms.	06
Q.2	(a) (b) (c)	Discuss various methods for solubility enhancement in liquid dosage forms. Write a detail note on hydrocolloids used in suspension with examples. Write a brief note on 1. Micro-emulsion 2. Multiple emulsion	06 05 05
Q.3	(a) (b) (c)	Discuss evaluation tests for pharmaceutical aerosol products. Discuss in brief the evaluation tests for medicated ointment. Write ideal requirements of ointment bases with examples.	06 05 05
Q.4	(a) (b)	Give the properties of ideal propellants used in aerosols. Discuss the causes and remedies for following problems in suppository manufacturing. i) Water and miscible liquids in suppositories ii) Volume contraction	06
Q.5	(c) (a) (b)	Draw well labeled diagram for aerosols packs. Explain different parts of it. What are clean rooms? Discuss the standards for clean rooms. Enumerate criteria for environmental monitoring of clean rooms. Describe storage conditions & quality control tests for water for injection.	05
	(c)	Write a note on containers and closures used for parentral products.	05
Q. 6	(a) (b) (c)	Write the formulation of a parentral product. Explain role of each ingredients. Enlist quality control tests for it. Write a note on Blow fill seal technology for parentral products. Describe pre-filling treatment of parentral containers.	06 05 05
Q.7	(a) (b) (c)	Explain in brief 1. Parentral suspensions 2. Freeze dried products 3. Tinctures 4. Infusion Write a detail note on parentral nutrition formulations. Explain in brief the formulation and manufacture of ophthalmic ointments with flow diagram.	06 05 05
