Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

M. Pharm. – SEMESTER – III • EXAMINATION – WINTER • 2014

Subject Code: 930107 **Date: 06-12-2014**

Subject Name: Pharmaceutical and Cosmetic Analysis

Time: 10:30 am - 01:30 pm **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)**	Enlist biological fluids. Describe solid phase extraction and membrane filtration technique for extraction of drug from biological fluid.	**06**
	(b)	Factor affecting extraction of drugs from biological samples.	**05**
	(c)	Discuss quality control test for colour cosmetics.	**05**
Q.2	**(a)**	Describe drug decomposition by oxidation with suitable example.	**06**
	(b)	Write a note on energetic and kinetics of photolysis.	**05**
	(c)	Describe method of analysis for Dental products.	**05**
Q.3	**(a)**	Describe solid state decomposition of pharmaceuticals with suitable examples.	**06**
	(b)	Discuss the physical stability testing for powder and granules.	**05**
	(c)	Write a note on physical stability of Liposomes and Niosomes.	**05**
Q.4	**(a)**	Write qualitative and quantitative determination of colouring materials and emulsifiers.	**06**
	(b)	How to perform identification and quantification of antioxidants.	**05**
	(c)	Write a note on quality control test for ethnic products.	**05**
Q.5	**(a)**	Write a note on Indian standard specification for testing of cosmetics in finished form.	**06**
	(b)	Write about safety and legislation of cosmetics products.	**05**
	(c)	Write a note on toxicity testing in cosmetics.	**05**
Q. 6	**(a)**	Write note on method of analysis used to determine quality of raw materials used in cosmetics.	**06**
	(b)	Discuss drug excipient and drug-drug interaction in solid state with suitable example.	**05**
	(c)	Discuss selection of Biological sample and extraction of drugs by liquid-liquid extraction technique.	**05**
Q.7		Write methods of analysis for the following finished cosmetics a) Baby care products b) Lipsticks c) Hair lotion d) Eye shadow	**16**

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