Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

M. Pharm. - SEMESTER - II • EXAMINATION - WINTER • 2015 **Subject Code: 1921501** Date: 07-12-2015 **Subject Name: Modern Pharmaceutical 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. 0.1 What is cosmetic? Discuss various method of analysis of cosmetic 06 (a) formulations. Enlist quality control standards for radiopharmaceuticals. Compare ELISA and 05 **(b)** (c) Write short note on Quality control methods for medicinal plant materials as 05 per WHO. **Q.2** Give a brief account on regulatory requirements of cosmetic formulations. 08 (a) **(b)** Describe the compendial testing of solid oral dosage form. 08 **Q.3** Enlist the characteristics of parenteral dosage forms. Discuss bio burden (a) 06 testing of parenteral products. Describe application of thermal methods in analysis of solid oral dosage **(b)** 05 form with examples. Enlist the analytical test for parenteral preparation. Discuss bacterial 05 (c) endotoxin testing. 0.4 What are the concepts of solubility? Outline two methods for determination of 08 (a) solubility of solid in liquid. Enlist and discuss in brief ICH guidelines in Pharmaceutical analysis. 08 **(b) Q.5** (a) Enlist various compendial parameters of standardization of herbal drugs and 08 formulations and discuss any two of them in detail. **(b)** How do impurities affect quality of drug formulation? Discuss stability study 08 requirements for new Drug substance as per ICH guideline. **Q.** 6 (a) Enlist the various analytical techniques used for preformulation studies. 06 Explain any one. **(b)** Discuss types and major steps of styptic mapping. 05 Explain concept and objectives of automated analysis? 05 Elaborate on "Amino acid sequence analysis" and "Isoelectric focussing" 08 **Q.7** (a)

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mechanical properties in preformulation study.

Explain the importance of preformulation study. Describe Pharmaceutical and

08

techniques.

**(b)**