GUJARAT TECHNOLOGICAL UNIVERSITY
M.PHARM- SEM-II–EXAMINATION – JULY 2012

Subject code: 2920104 **Date: 06/07/2012**
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.**

Q.1	(a)	Enlist the analytical tests for parenteral preparations. Discuss sterility testing and particulate matter test	**06**
	(b)	Explain how ion exchange chromatography aid in amino acid analysis.	**05**
	(c)	Describe properties associated with particulate level in pharmaceuticals	**05**
Q.2	(a)	Enlist and discuss in brief ICH guideline in pharmaceutical analysis	**06**
	(b)	Describe role of Near Infred Analysis in solid dosage form analysis.	**05**
	(c)	What are the analytical methods used for biotechnological derived products.	**05**
Q.3	(a)	Explain the term solid state analysis of drug substances. Properties associated with molecular level.	**06**
	(b)	Enlist various compendia parameters of standardization of herbal drugs and formulations and discuss any two of them in detail.	**05**
	(c)	What is tryptic maping. Discuss it uses and limitations.	**05**
Q.4	(a)	What are preformulation studies? Describe analytical techniques for preformulation analysis.	**06**
	(b)	Define the term cosmetic. Explain in brief various methods of analysis of cosmetic formulations.	**05**
	(c)	Quality control of radiopharmaceuticals.	**05**
Q.5	(a)	Explain in detail various physicochemical characterization techniques for the analysis of solid oral dosage form.	**06**
	(b)	Describe properties associated with molecular level in pharmaceuticals.	**05**
	(c)	Discuss isoelectric focusing techniques.	**05**
Q. 6	(a)	Why impurities analysis is required? Discuss drug substance degradation studies.	**06**
	(b)	Explain compendia testing. Describe various compendial test for testing API and its dosage form with suitable example.	**05**
	(c)	Quality control methods for medicinal plant materials as per WHO	**05**
Q.7	(a)	Outline of preformultion report.	**06**
	(b)	Discuss bacterial endotoxin testing	**05**
	(c)	Automated analysis	**05**

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