

Seat No.:-----

Enrolment No.:-----

UKA TARSADIA UNIVERSITY
Maliba Pharmacy College
M.Pharm. Sem 2-Internal Examination 2012
040030202 Modern Pharmaceutical Analysis

Time: 1:30 to 4:30 p.m.

Max. Marks: **70**

Date: 21/04/2012

Instructions:

- Question no. **1 is compulsory.**
- From Q.2 to Q.7 attempt any **four** questions.
- Figures to the right indicate full marks.

Q.1	(a)	Answer the following: (any six)	06
		1 Define compendia.	
		2 What are cosmetics?	
		3 What is meant by organoleptic evaluation of herbal drugs?	
		4 Define dissociation constant.	
		5 What are radiopharmaceuticals?	
		6 What does ICH stand for?	
		7 Define partition coefficient.	
		8 What are endotoxins?	
	(b)	Describe in brief: (any four)	08
		1 Differentiate between specified and unspecified degradation product.	
		2 Write the procedure for determination of ash in herbal drugs.	
		3 Name the different types of isomeric impurities in drugs.	
		4 What are residual solvents?	
		5 Enlist the various compendial tests for solid oral dosage forms.	
		6 What are admixture studies?	
Q.2	(a)	How is particulate matter determined in parenteral products?	04
	(b)	Discuss the objectives and significance of preformulation studies.	05
	(c)	Enlist the radiochemical methods of analysis and explain any one in detail.	05
Q.3	(a)	Describe in brief the membrane filtration method for sterility testing.	04
	(b)	Enlist the different physical, chemical and biological tests for analysis of cosmetics	05
	(c)	Discuss the applications of NIR technique in solid oral dosage form analysis.	05
Q.4	(a)	Enlist the records to be maintained for radiopharmaceuticals as per cGMP.	04
	(b)	Describe the principle behind isoelectric focusing technique.	05
	(c)	What is polymorphism? Explain its significance in formulation development.	05
Q.5	(a)	Describe any one method for determination of solubility of drugs.	04
	(b)	Write a short note on flow injection analyzer.	05
	(c)	Discuss with examples the types of inorganic impurities in drug substance.	05
Q. 6	(a)	Write the significance of bioburden determination in parenterals.	04
	(b)	Discuss the principle and applications of DSC in analysis of drugs.	05
	(c)	Write the procedure and significance of determining bulk density and angle of repose for powders.	05
Q.7	(a)	Discuss with examples the analytical techniques for identification of drugs.	04
	(b)	Write a note on the ion exchange technique for amino acid analysis.	05
	(c)	Explain briefly the different ICH Quality guidelines for analysis of pharmaceuticals.	05