Seat No.:	Enrolment No.

## **GUJARAT TECHNOLOGICAL UNIVERSITY**

## M. PHARM - SEMESTER-II • EXAMINATION - SUMMER 2016

Subject Code: 2920107 Date: 19/05/2016

**Subject Name: Pharmaceutical Analysis -II** 

Time: 10:30 AM To 1:30 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 and discuss different methods used in phytochemical extraction.	06
	<b>(b)</b>	Describe SFC as a method for phytochemical analysis	05
	(c)	Write a note on sequential steps in extraction of plant constituents.	05
Q.2	(a)	Give a detailed account of Ash Value.	06
	<b>(b)</b>	What is an Extractive value? Discuss their types and methods.	05
	(c)	Discuss in detail methods for determination of fiber content.	05
Q.3	<b>(a)</b>	Discuss various parameters in analysis of Asava and Aristha.	06
	<b>(b)</b>	Enlist and discuss the evaluation parameters for Ghrita/Taila.	05
	(c)	Write an explanatory note on Iodine value, Acid value and Saponification value.	05
Q.4	(a)	What are amino acids and proteins? Discuss method to determine	06
		primary structure of proteins.	
	<b>(b)</b>	Describe purification of peptide and proteins using size exclusion	05
	( )	chromatography.	0.5
	(c)	Write a note on Isoelectric focusing method for separation of peptides and proteins.	05
Q.5	(a)	What are Impurity and Related substance? Give an account of stress degradation study.	06
	<b>(b)</b>	Discuss in detail ICH Q3A Guideline of Impurity in new drug	05
		substances.	۰.
	(c)	Why it is necessary to control Residual Solvent? Discuss ICH Q3C Guideline for Residual Solvent.	05
Q. 6	(a)	Discuss in detail Counter Current Chromatography.	06
	<b>(b)</b>	Write an explanatory note on use of LC-MS in drug analysis.	05
	(c)	Describe different sample preparation techniques employed in quantification of drugs in biological matrices.	05
Q.7	(a)	Discuss Electrophoretic techniques used for isolation of peptides	06
	<b>(b)</b>	Give an account of Ion exchange chromatography used for peptide	05
		and protein purification.	o =
	(c)	Write giving suitable examples principles underlying analysis of antihypertensive or antidibetic drugs official in IP.	05

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