Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FIFTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), DECEMBER 2019

Course Code: FT307
Course Name: FOOD ANALYSIS

Max. Marks: 100   Duration: 3 Hours

PART A
Answer any two full questions, each carries 15 marks.

Marks

1	a)	Write an essay on the regulations of FSSA 2006.	(10)
	b)	Write short notes on the functions of EIC.	(5)
2	a)	Give details on the role of AOAC in food analysis.	(8)
	b)	Explain Karl Fischer Titration technique for moisture analysis.	(7)
3	a)	Define Sampling plan. Mention the sampling procedures as per FSSA 2006.	(10)
	b)	Explain the procedures for wet ashing and dry ashing.	(5)

PART B
Answer any two full questions, each carries 15 marks.

4	a)	Explain the principles of Spectroscopy in relation to Beer-Lambert''s law.	(3)
	b)	Write an essay on UV-Visible spectrophotometer with neat sketch.	(12)
5	a)	Illustrate the principle and working of Fluorescence Spectroscopy.	(8)
	b)	How does separation takes place in Gel filtration chromatography.	(7)
6		Explain the principle, working and instrumentation of High performance liquid chromatography.	(15)

PART C
Answer any two full questions, each carries 20 marks.

7	a)	Describe the principle and various types of ELISA with neat sketch.	(10)
	b)	Elucidate the methods used for protein analysis in food.	(10)
8	a)	Write about the principle and working of Agarose gel electrophoresis and PAGE.	(10)
	b)	Write an essay on the methods to analyse extraneous matter in foods.	(10)
9	a)	Write a note on the significance and advantages of biosensors in food analysis.	(10)
	b)	What are Ion sensitive electrodes and give its applications.	(10)