GUJARAT TECHNOLOGICAL UNIVERSITY B. Pharm. – SEMESTER – VII • EXAMINATION – SUMMER 2013

Subject Code: 270004 Date: 23-05-2		de: 270004 Date: 23-05-2013	
Subject Name: Pharmaceutical Analysis-III Time: 02.30 am - 05.30 pm Total Marks Instructions:			
msu	 Attempt any five questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 		
Q.1	(a)	Define UV Spectroscopy. Discuss UV spectra. Give details about the wave	0
	(b)	Give an account of the detectors used in UV VIS spectrophotometer.	0
	(c)	Discuss application of UV-Visible spectroscopy	0
Q.2	(a)	Why IR spectroscopy is most widely used for identification of pharmaceuticals. clarify qualitative application of IR spectroscopy.	0
	(b)	Explain types of stretching and bending vibration in IR spectroscopy.	0
	(c)	Differentiate dispersive IR and FTIR. What are advantages of FTIR compared to dispersive IR spectrophotometers?	0
Q.3	(a)	Write a note on factors affecting fluorescence intensity.	0
	(b)	Give explanation about advantages and limitations of fluorescence spectroscopy. Draw a well labeled diagram of fluorimeter.	0
	(c)	Present pharmacopoeial applications of fluorimetry.	0
Q.4	(a)	Discuss in detail the principle of NMR. Explain instrumentation in NMR.	0
	(b)	NMR spectroscopy	.0
	(c)	Discuss applications of NMR spectroscopy.	0
Q.5	(a)	Write a note on principles of Mass spectrometry.	0
	(b)	Enlist Ionization techniques of Mass spectrometry. Explain Chemical	0
	(c)	Draw a well labeled diagram of a Mass Spectrometer. Discuss Quadrupole analyzer.	0
Q. 6	(a)	Write principle of Atomic absorption Spectroscopy. Give its applications.	0
	(b)	Write short note on Flame Photometer	0
	(C)	Give Differences between AA5 and AE5	U
Q.7	(a)	Discuss use of spectroscopy in structure elucidation.	0
	(b) (c)	Discuss Mass Spectra and Types of Peak in Mass Spectra	0
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