Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

B.PHARM. - SEMESTER- V • EXAMINATION - SUMMER-2016

Subject Code: 2250003 Date: 04/05/2016

Subject Name: Pharmaceutical Analysis - III

Time: 2:30 PM to 5:30 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) (b) (c)	Explain origin of UV spectroscopy. Enlist radiation source used in UV spectroscopy and discuss any one in detail. Write a note on photometric titration.	06 05 05
Q.2	(a) (b) (c)	Explain auxochrome, molar absorptivity and quencher Describe properties of EMR. Explain calibration of UV –Vis spectrophotometer as per IP	06 05 05
Q.3	(a) (b) (c)	Explain principle of mass spectroscopy. Enlist different mass analyzers and discuss quadrupole mass analyzer. Discuss fragmentation rule of mass spectroscopy.	06 05 05
Q.4	(a) (b) (c)	Describe sample handling techniques used in IR spectroscopy. Write a short note on FT-IR Enlist detectors used in IR spectroscopy and explain any one in detail.	06 05 05
Q.5	(a) (b) (c)	What is fluorescence? Discuss factors affecting fluorescence intensity. Draw a labeled diagram of spectrofluorimeter. Write a difference between UV and IR spectroscopy.	06 05 05
Q. 6	(a) (b) (c)	Write the difference between AAS and AES Explain principle of flame photometer. Write a note on Hollow cathode lamp.	06 05 05
Q.7	(a) (b) (c)	Explain fundamental principle of NMR spectroscopy. What is chemical shift? Why TMS is used as reference compound in NMR. Write a short not on C13 NMR.	06 05 05
