GUJARAT TECHNOLOGICAL UNIVERSITY ME - SEMESTER–I(New course)• EXAMINATION – WINTER- 2015Subject Code: 2711306Date:04/01/2016Subject Name: Rail Transportation System Planning and Design Time:2:30 pm to 5:00 pmTotal Marks: 70Instructions:1. Attempt all questions.2. Make suitable assumptions wherever necessary.3. Figures to the right indicate full marks.			
Q.1	(a)	Define gauge. How many gauges are adopted in India? Describe their width with their suitability.	07
	(b)	Explain the advantages of Uniformity of Gauges in the Country.	07
Q.2	(a)	What are the types of Rail sections? Explain each with sketch	07
	(b)	Write a short note on: effects of creep. OR	07
	(b)	Explain the requirements of good crossings?	07
Q.3	(a)	Describe the various principle for fixation of rates and fares in railway.	07
	(b)	Write a short note on - Aggregate Simultaneous Model OR	07
Q.3	(a)	Define ó Traffic Survey. What are the objectives of Traffic Survey? Explain the	07
	(b)	types of data collected in Traffic Survey. Define ó Interlocking. Explain various types of Interlocking.	07
Q.4	(a)	Explain ó techno economic survey.	07
	(b)	Explain ó Anti-collision devices in railway system OR	07
Q.4	(a)	Explain various steps of planning for railway system.	07
	(b)	Illustrate the various types of rail failures with sketches.	07
Q.5	(a)	Explain the functions of sleepers.	07
	(b)	Explain ó Reconnaissance Survey. OR	07
Q.5	(a)	Explain the Idealized Planning process for Railway Transportation.	07
	(b)	Draw the cross section of Broad Gauge in embankment and cutting for double line with electric traction.	07
