Se	eat No	:: Enrolment No	
	GUJARAT TECHNOLOGICAL UNIVERSITY		
		M.E –II st SEMESTER–EXAMINATION – JULY- 2012	
Sı	ubjec	et code: 1721207 Date: 14/07/201	12
Sı	ubjec	et Name: Infrastructure Engineering and management	
\mathbf{T}	ime:	10:30 am – 13:00 pm Total Marks: '	70
Ir	ıstru	ctions:	
		Attempt all questions.	
		Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Give general characteristics of infrastructure project Explain (i) goal and (ii) steps of life cycle analysis	07 07
Q.2	(a) (b)	Explain different types of data to be collected for infrastructure project (Consider any typical infrastructure project). Also discuss data analysis Describe the (i) Technological risk and (ii) Construction Risk of infrastructure	07 07
		project OR	
	(b)	What is need assessment of infrastructure project? describe the need assessment of any type of infrastructure project	07
Q.3	(a)	Discuss case study of any typical infrastructure project giving Technical and planning details	07
	(b)	The details of power need of different Industries are given below in MW 1.2, 2.0, 3.5, 4.2, 5.6, 2.2, 2.9, 3.0, 4.3, 2.1, 1.9, 1.1 find out (i) Mean (ii) Median (iii) Variance (iv) Standard deviation (v) Coefficient of variance	07
		OR	
Q.3	(a)	Explain Important of rehabilitation strategy of any project. Describe necessary steps to be taken for rehabilitation of project affected people of any dam project	07
	(b)	Explain Role of Infrastructure in India's development	07
Q.4	(a)	How Infrastructure management system will help in management of infrastructure project. Also discuss how management system can be developed for infrastructure project?	07
	(b)	Explain planning process of Building Infrastructure for residential township scheme to accommodate 100000 population . OR	07
Q.4	(a)	Explain (i) BOT (ii) BOO (iii)DB/Turn key	07
Q.4	(b)	Explain Economic analysis of Infrastructure project . Also discuss how it will be useful in calculating user charges	07
Q.5	(a) (b)	Explain different challenge mitigation strategies of infrastructure project Describe general considerations of life cycle analysis of any thermal power station	07 07
		OR	
Q.5	(a) (b)	Explain performance indicators of infrastructure project What is performance evaluation? Explain performance of evaluation of any transportation or communication infrastructure project	07 07
