GUJARAT TECHNOLOGICAL UNIVERSITY
M. E. - SEMESTER – II • EXAMINATION – SUMMER • 2013

Subject code: 1721207   **Date: 07-06-2013**
Subject Name: Infrastructure Engineering and Management
Time: 10.30 am – 01.00 pm   **Total Marks: 70**
Instructions:
1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	What is the meaning of infrastructure? And explain the present infrastructure status in India.	**07**
	(b)	Explain hard and soft infrastructure project in detail.	**07**
Q.2	**(a)**	What are risks involved in any infrastructure project? Explain technological and construction risk with example.	**07**
	(b)	What is the PPP? Explain BOO and DFBOT in detail	**07**
		OR	
	(b)	Explain the challenges and risk involved in Yamuna express way project from Noida to Agra.	**07**
Q.3	**(a)**	Why need assessment of infrastructure project is required? Which data is needed for any infrastructure project?	**07**
	(b)	Role of infrastructure in development of any country.	**07**
		OR	
Q.3	**(a)**	Explain different feasibility skills.	**07**
	(b)	Give the purpose of life cycle analysis and describe the phases of LCA.	**07**
Q.4	**(a)**	Explain the following terms: (i) Variance (ii) Standard deviation (iii) Sampling (iv) Confidence.	**07**
	(b)	Explain the need of data in railway infrastructure project.	**07**
		OR	
Q.4	**(a)**	Explain rehabilitation and maintenance strategies.	**07**
	(b)	What is the importance of data in LCA? And explain LCA user and tools.	**07**
Q.5	**(a)**	What is management information system? Give its functions and explain IIMS with its advantages.	**07**
	(b)	Explain the features of power plant project with its impact and importance.	**07**
		OR	
Q.5	**(a)**	Define project cost and project revenue. How they can be determining?	**07**
	(b)	Write a note on performance evaluation.	**07**

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