Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY
ME- SEMESTER II– EXAMINATION – SUMMER 2015

Subject Code: 2721405 **Date: 01/06/2015**
Subject Name: Value Engineering
Time: 2:30 PM – 5:00 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)	State and explain various objectives of Value Engineering.	07
	(b)	Discuss the relevance of Value Engineering to development projects in India as compared to conventional cost reduction technique.	07
Q.2	(a)	Enlist and explain the various reasons for poor value.	07
	(b)	"A value analysis team must be multidiscipline" – Justify.	07
		OR	
	(b)	Write short note Value Engineering in Project Management.	07
Q.3	(a)	Describe the various phases of 5-phase job plan and explain its application in value engineering study.	07
	(b)	Explain differences between costs, worth and value with example.	07
		OR	
Q.3	(a)	Justify following statement: "Job-plan is very important tool of Value engineering kit."	07
	(b)	Define the term value. Explain the factors affecting it and also discuss modes of improving value.	07
Q.4	(a)	Explain the following terms: Basic Function, Supporting Function, Higher Level Function, Lower level Function, Critical Path Functions, Scope Line, and Unnecessary Function.	07
	(b)	Write detailed note on: FAST Diagramming.	07
		OR	
Q.4	(a)	Define and explain the terms with example: Use value, Esteem value, Exchange value & Cost value.	07
	(b)	What is FAST diagramming? State the ground rules of preparing FAST diagramming.	07
Q.5	(a)	Define Creative Thinking and describe characteristics of creative people.	07
	(b)	State the types of cost models and describe any one cost model along with its benefits.	07
		OR	
Q.5	(a)	What is the importance of creative thinking in value analysis? State different creative problem solving techniques and explain procedure of any one.	07
	(b)	Define and explain the concept of life cycle costing approach for value engineering studies.	07

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