Seat No.:	Enrolment No.
Seat No	Emoment no

GUJARAT TECHNOLOGICAL UNIVERSITY

ME – SEMESTER II– EXAMINATION – SUMMER 2017

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	•	Code: 2721405 Date: 30/05/201 Name: Value Engineering	17
Ti	-	2:30 pm to 5:00 pm Total Marks: '	70
1115	1. 2.	Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks.	
Q.1	(a) (b)	Discuss the origin and development of value engineering concept. Discuss the relevance of Value Engineering to rapidly developing India in all the sectors with a dynamic market scenario.	07 07
Q.2	(a) (b)	Explain the statement: "Item oriented approach will never lead to real worth". Justify the statement with suitable example: "A value analysis team must be multidiscipline".	07 07
	(b)	OR Appraise the following statement with suitable example: "Value index is an indicator of the potential of the value project".	07
Q.3	(a)(b)	Discuss the VE techniques applied in an example of "Food Container" used by Indian Defense force in accordance with the VE job plan. State and explain the flow of actions with standard formats from creative phase to development phase of a job plan.	07 07
Q.3	(a) (b)	Discuss briefly the objectives and benefits of Value Engineering in Construction Project Management. In a multistoried residential frame structure project, it is planned to construct the external walls with clay bricks. The following alternatives were listed during creative phase to perform the same function: (a) To use CLC blocks, (b) To use fly ash bricks, (c) To use concrete block panels (d) To use AAC blocks. Perform the task of judgment phase in standard format for the above ideas and give your remark.	07 07
Q.4	(a) (b)	Enlist and define various types of values with suitable example. Explain how the lack of time, lake of information and lack of idea results to poor value. OR	07 07
Q.4	(a) (b)	Enlist and define various types of functions with suitable example. Explain the FAST diagram and explain with example of: Treatment of raw water.	07 07
Q.5	(a)	State the importance of three basic laws of creativity: Similarity, Contiguity and	07
	(b)	Contrast. Enlist various cost models and describe any one cost model along with its benefits over the other.	07
Q.5	(a)	Give as many as creative ideas to fulfill following functions/problem statement with the rules to be followed during creative phase of VE job plan: i. Internal/Partition wall in a frame structure.	07
	(b)	ii. External Plaster State the importance of Life Cycle Costing in value engineering approach with suitable example.	07
