Code: 20ME2601A

III B.Tech - II Semester – Regular / Supplementary Examinations APRIL 2024

VALUE ENGINEERING
(Common to All Branches)

Duration: 3 hours   Max. Marks: 70

Note: 1. This paper contains questions from 5 units of Syllabus. Each unit carries 14 marks and have an internal choice of Questions.
2. All parts of Question must be answered in one place.

BL – Blooms Level   CO – Course Outcome

			BL	CO	Max. Marks
UNIT-I					
1	a)	What is Value Engineering? Enumerate its advantages and applications.	L2	CO1	7 M
	b)	How do you recognize a problem using Value Engineering? Explain.	L2	CO1	7 M
OR					
2	a)	Describe the significance of Value Engineering in an organization.	L2	CO1	7 M
	b)	How can one evaluate the ideas for implementing Value Engineering? Explain.	L2	CO1	7 M
UNIT-II					
3	a)	What are the orientation and information phases of Value Engineering job plan? Explain.	L2	CO2	7 M

	b)	Explain various methods selection for implementing Value Engineering.	L2	CO2	7 M
		OR			
4	a)	How can one select the project for implementing Value Engineering? Explain.	L2	CO2	7 M
	b)	What are the speculation and analysis phases of Value Engineering job plan? Explain.	L2	CO2	7 M

UNIT-III

5	a)	How do you determine and evaluate the function(s) assigning rupee equivalents in Value Engineering techniques? Explain.	L2	CO3	7 M
	b)	Explain the Value Engineering programmes.	L2	CO3	7 M
		OR			
6		Apply the Function Analysis System Technique (FAST) for any product of your interest and explain with a sketch.	L3	CO3	14 M

UNIT-IV

7	a)	Discuss the maintenance and repair cost during service life of a product while implementing the Value Engineering.	L2	CO3	7 M
	b)	Explain the application of Value Engineering in enhancing the non-hardware projects utility.	L3	CO3	7 M
		OR			
8	a)	How do you initiate a value engineering programme? Explain in detail.	L2	CO3	7 M

	b)	Articulate about the career development for value engineering specialists.	L3	CO3	7 M

UNIT-V

9	a)	Identify the functions associated with the designer of Value Engineering team.	L2	CO4	7 M
	b)	Describe the process of implementation of value engineering programme in a construction project.	L2	CO4	7 M

OR

10	Demonstrate a case study that how the cost can be reduced by using value engineering in any organization for any product or service.	L3	CO4	14 M