

U.S.N.

B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

January 2024 Semester End Main Examinations

Programme: B.E.

Branch: Mechanical Engineering

Course Code: 20ME7DCPRM

Course: Project Management

Semester: VII

Duration: 3 hrs.

Max Marks: 100

- Instructions:**
1. Answer any FIVE full questions, choosing one full question from each unit.
 2. Missing data, if any, may be suitably assumed.
 3. Standard Normal Cumulative Probability Table is PERMITTED.

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.			UNIT - I												<i>CO</i>	<i>PO</i>	Marks
	1	a)	Discuss the complete and contemporary view of project success.												<i>CO1</i>	<i>PO1</i>	10
		b)	Discuss the characteristic features of project.												<i>CO1</i>	<i>PO1</i>	10
			UNIT - II														
	2	a)	With neat sketch describe the matrix organization structure highlighting its advantages and limitations.												<i>CO2</i>	<i>PO1</i>	10
		b)	Discuss the various formats and significance of work breakdown schedule.												<i>CO3</i>	<i>PO1</i>	10
			OR														
	3	a)	Discuss the basic roles and responsibilities of a project manager.												<i>CO2</i>	<i>PO1</i>	10
		b)	Explain the steps involved in scope management with suitable examples.												<i>CO3</i>	<i>PO1</i>	10
			UNIT - III														
	4	a)	Represent schematically the errors occurring in a network diagram and explain the same.												<i>CO3</i>	<i>PO1</i>	05
		b)	The following table shows the jobs of the project with duration in days. Draw the network, determine critical path and all floats.												<i>CO3</i>	<i>PO1</i> <i>PO4</i>	15
			1- 2	1- 3	1- 4	2- 5	3- 7	4- 6	5- 7	5- 8	6- 7	6- 9	7- 10	8- 10	9- 10	10- 11	11- 12
			10	8	9	8	16	7	7	7	8	5	12	10	15	8	5
			OR														
	5	a)	Define Merge and burst events using the example of a network diagram.												<i>CO3</i>	<i>PO1</i>	05

	b)	The following table gives the activities of a construction project. Calculate the following: a) Minimum and normal project length. b) Determine the crashing costs. c) What is the optimal project duration of each job? Overhead of the project is Rs. 60 per day.	CO3	PO1 PO4	15																												
		<table><tr><th>Activity</th><th>Normal duration (days)</th><th>Crash duration (days)</th><th>Cost of crashing (Rs. per day)</th></tr><tr><td>1-2</td><td>9</td><td>6</td><td>20</td></tr><tr><td>1-3</td><td>8</td><td>5</td><td>25</td></tr><tr><td>1-4</td><td>15</td><td>10</td><td>30</td></tr><tr><td>2-4</td><td>5</td><td>3</td><td>10</td></tr><tr><td>3-4</td><td>10</td><td>6</td><td>15</td></tr><tr><td>4-5</td><td>2</td><td>1</td><td>40</td></tr></table>	Activity	Normal duration (days)	Crash duration (days)	Cost of crashing (Rs. per day)	1-2	9	6	20	1-3	8	5	25	1-4	15	10	30	2-4	5	3	10	3-4	10	6	15	4-5	2	1	40			
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		UNIT - IV																															
6	a)	Discuss different types of costs in budgeting.	CO4 CO5	PO1	10																												
	b)	Explain the various methods of cost estimation.	CO4 CO5	PO1	10																												
		UNIT - V																															
7	a)	Explain the components and decisions to be made with respect to supply chain management.	CO4 CO5	PO1	10																												
	b)	Explain with example how to plan procurement management and the significance of the same.	CO4 CO5	PO1	10																												
