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

Autonomous Institute Affiliated to VTU

## January / February 2025 Semester End Main Examinations

**Programme: B.E.**

**Semester : VII**

**Branch: Institutional Elective**

**Duration: 3 hrs.**

**Course Code: 24ME7OEP RM**

**Max Marks: 100**

**Course: Project Management**

**Instructions:** 1. Answer any FIVE full questions, choosing one full question from each unit.  
2. Missing data, if any, may be suitably assumed.

			<b>UNIT - I</b>		<i>CO</i>	<i>PO</i>	<b>Marks</b>
<b>Important Note:</b> Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.	1	a)	Explain the concept of a Project and explain the different categories of Project.		<i>CO1</i>	<i>PO1</i>	<b>10</b>
		b)	What is work break down structure (WBS)? Explain with its advantages.		<i>CO1</i>	<i>PO1</i>	<b>10</b>
	<b>OR</b>						
	2	a)	With the help of a neat sketch, explain different phases of project life cycle.		<i>CO1</i>	<i>PO1</i>	<b>10</b>
		b)	Explain the roles and responsibilities of a Project Manager.		<i>CO1</i>	<i>PO1</i>	<b>10</b>
			<b>UNIT - II</b>				
	3	a)	Explain the steps in tendering and selection of contractors.		<i>CO2</i>	<i>PO1</i>	<b>10</b>
		b)	Explain the skills and abilities required of a project Manager.		<i>CO2</i>	<i>PO1</i>	<b>10</b>
	<b>OR</b>						
	4	a)	Explain with sketches the following organizational structures in project management. i) Functional organization ii) Project organization iii) Matrix organization		<i>CO2</i>	<i>PO1</i>	<b>12</b>
		b)	List Project Managers authorities.		<i>CO2</i>	<i>PO1</i>	<b>08</b>
			<b>UNIT - III</b>				
	5		Consider the following data for activities in a given project		<i>CO3</i>	<i>PO2</i>	
		i)	Construct the network diagram.				<b>06</b>
		ii)	Find the critical path.				<b>04</b>
		iii)	Tabulate Early start and Finish, Late start and Finish for each activity.				<b>06</b>
		iv)	Find Total and Free float for each activity.				<b>04</b>

			<table border="1"> <thead> <tr> <th>Activities</th><th>Predecessors</th><th>Duration (Days)</th></tr> </thead> <tbody> <tr><td>A</td><td>-</td><td>6</td></tr> <tr><td>B</td><td>A</td><td>4</td></tr> <tr><td>C</td><td>B</td><td>7</td></tr> <tr><td>D</td><td>A</td><td>2</td></tr> <tr><td>E</td><td>D</td><td>4</td></tr> <tr><td>F</td><td>E</td><td>10</td></tr> <tr><td>G</td><td>-</td><td>2</td></tr> <tr><td>H</td><td>G</td><td>10</td></tr> <tr><td>I</td><td>J, H</td><td>6</td></tr> <tr><td>J</td><td>-</td><td>13</td></tr> <tr><td>K</td><td>A</td><td>9</td></tr> <tr><td>L</td><td>C, K</td><td>3</td></tr> <tr><td>M</td><td>I, L</td><td>5</td></tr> </tbody> </table>	Activities	Predecessors	Duration (Days)	A	-	6	B	A	4	C	B	7	D	A	2	E	D	4	F	E	10	G	-	2	H	G	10	I	J, H	6	J	-	13	K	A	9	L	C, K	3	M	I, L	5		
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			<b>OR</b>																																												
6	a)	Explain the different time estimates in PERT.		CO3	PO2	<b>06</b>																																									
	b)	Differentiate between PERT and CPM.		CO3	PO2	<b>06</b>																																									
	c )	Explain Gantt chart with a neat sketch and its applications.		CO3	PO2	<b>08</b>																																									
			<b>UNIT - IV</b>																																												
7	a)	Discuss the different types of costs associated with projects?		CO4	PO4	<b>10</b>																																									
	b)	Discuss the activities carried out to “Determine Budget” of a project.		CO4	PO4	<b>10</b>																																									
			<b>OR</b>																																												
8	a)	Highlight the importance of Plan cost management in projects.		CO4	PO4	<b>10</b>																																									
	b)	Explain the methods of estimating costs.		CO4	PO4	<b>10</b>																																									
			<b>UNIT - V</b>																																												
9	a)	Explain any four important types of contracts in Project management.		CO5	PO2	<b>10</b>																																									
	b)	Explain the “Make or Buy” decision process.		CO5	PO2	<b>10</b>																																									
			<b>OR</b>																																												
10	a)	Explain the important factors of project supply chain management.		CO5	PO2	<b>10</b>																																									
	b)	Explain the sources of potential suppliers.		CO5	PO2	<b>10</b>																																									

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