

U.S.N.									
--------	--	--	--	--	--	--	--	--	--

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

Autonomous Institute Affiliated to VTU

## January / February 2025 Semester End Main Examinations

Programme: B.E.

Branch: Institutional Elective

Course Code: 24ME7OEPRM

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.

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.			<b>UNIT - I</b>	<i>CO</i>	<i>PO</i>	<b>Marks</b>
	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><tr><td>Activities</td><td>Predecessors</td><td>Duration (Days)</td></tr><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></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			
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																																														
			<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>																																											

\*\*\*\*\*