

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

Autonomous Institute Affiliated to VTU

January / February 2025 Semester End Main Examinations

Programme: B.E.

Semester: VI

Branch: Information Science and Engineering

Duration: 3 hrs.

Course Code: 22IS6HSSPM

Max Marks: 100

Course: Software Project Management and Finance

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

			UNIT - I		
			<i>CO</i>	<i>PO</i>	Marks
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.	1	a)	Compare Project, Program and Portfolio with a suitable example of your choice. Depict the relationship among Portfolios, Programs, and Projects with a neat diagram.	<i>CO1</i>	<i>PO</i>
		b)	With a neat diagram, provide a Matrix Organizational structure (Weak, Strong and Balanced) for a IT company with departments Human Resource, Finance, Operations and Marketing.	<i>CO2</i>	<i>PO1</i>
OR					
	2	a)	A project management office (PMO) is a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools, and techniques. Describe the 3 types of PMO Structures in an organization varying in the degree of control and influence they have on projects with suitable examples for each.	<i>CO2</i>	<i>PO1</i>
		b)	Provide an Functional Organizational structure for a IT company with departments Human Resource, Finance, Operations and Marketing.	<i>CO2</i>	<i>PO1</i>
		c)	Assuming that you are organizing a graduation day for the engineering students, explain the 5 different project management process groups.	<i>CO1</i>	<i>PO1</i>
UNIT - II					
	3	a)	Assume that you are the project manager of an IT company. A new project has been assigned to your team for developing a website for online shopping. Write a project charter by considering the business need, scope, timelines, deliverable, finance, risks and issues involved.	<i>CO2</i>	<i>PO1</i>
		b)	Design a project management plan for electric car manufacturing system, considering business need, scope, timelines, deliverable, finance, risks and issues involved.	<i>CO2</i>	<i>PO1</i>
OR					

	4	a)	Discuss about the various tools and techniques used in the collect requirement phase.	CO2	PO1	10
		b)	Elucidate in detail the work breakdown structure for a construction company.	CO2	PO1	10
			UNIT - III			
	5	a)	Explain in detail the tools and techniques involved in Estimate cost.	CO3	PO11	10
		b)	Assume you are managing a project which is into six months of its execution. You are now reviewing the project status and you have ascertained that project is behind schedule. The actual cost of Activity A is \$ 2,00,000 and that of Activity B is \$ 1,00,000. The planned value of these activities is \$1,80,000 and \$ 80,000 respectively. The Activity A is 100% complete. However, Activity B is only 75% complete. Calculate the schedule performance index and cost performance index of the project on the review date.	CO3	PO2	10
			OR			
	6	a)	Write a note on the following: <ul style="list-style-type: none"> i. Schedule Variance ii. Cost Variance iii. Schedule Performance Index iv. Cost Performance Index 	CO3	PO11	8
		b)	Describe the importance of developing a “Cost Management Plan”.	CO3	PO11	8
		c)	The latest Earned value report of the project shows CPI = 1.2, SPI = 0.8, PV = \$500,000, SV = -\$220,000. Calculate the Cost Variance of the project.	CO3	PO2	4
			UNIT - IV			
	7	a)	Illustrate all the Quality Management and Control Tools used for managing the project’s quality.	CO4	PO7	10
		b)	Discuss “Plan Communication Management” process in detail.	CO4	PO10	10
			OR			
	8	a)	Discuss about the “Perform Quality Assurance” process in detail.	CO4	PO7	10
		b)	Discuss about the “Plan Human Resource Management” process in detail.	CO4	PO7	10
			UNIT - V			
	9	a)	Risk management plan helps to ensure the risks are proactively managed to minimize their impact. Describe the ten components that are considered to create an effective Risk Management Plan for a software project.	CO4	PO10	10
		b)	Identify and explain Stakeholder phase in detail.	CO4	PO12	10
			OR			

	10	a)	Explain the Plan Procurement Management phase in detail.	CO4	PO12	10
		b)	Explain how unacademy's acquired Indian market and became one of the leading start-up unicorn in India? What should be the long term change they need include to improve their business in this competitive market?	CO4	PO10	10

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