K. K. Wagh Institute of Engineering Education & Research, Nashik

(An Autonomous Institute From A.Y. 2022-23)

WINTER-2025	
Exam Seat No.:	
Academic Year:2025-2026	Semester:III
Class:SYMCA	Program:MCA
Branch Code:M.C.A.	Pattern:2024
Name of Course: Software Project Management	Course Code:2409601
Max. Marks:60	Duration:2.30 Hrs.

Instructions: Candidates should read carefully the instructions printed on the Question Paper and on the cover page of the Answer Book, which is provided for their use.

1. This question paper contains ___TWO__page(s).
2. Answer to each new question is to be started on a new page.
3. Assume suitable data wherever required, but justify it.
4. Draw the neat labelled diagrams, wherever necessary.
5. The last columns indicates the Course Outcome and level of Blooms Taxonomy of the Question/sub-question.

		Marks	CO
Question No. 1			
1a)	Describe the stepwise project planning process. How does it help in anticipating risks and ensuring effective resource utilization?	(6)	CO1
Question No. 2			
2a)	How would you apply different software effort estimation techniques to suggest how a project manager can plan effort estimation for a mobile banking application? Justify your answer with suitable example.	(6)	CO2
Question No. 3			
3a)	A project team is developing a mobile banking application. The total project budget (BAC) is ₹3,00,000, and the project duration is 6 months. At the end of month 3, the following information is available: • Planned completion: 55% • Actual work completed: 60% • Actual Cost (AC) so far: ₹1,80,000 Tasks: 1. Calculate the Planned Value (PV) 2. Calculate the Earned Value (EV) Calculate the Cost Variance (CV) and interpret the result.	(8)	CO3
	OR		
3b)	Illustrate the use of different review approaches to locate and resolve logic errors in code written by a junior developer before deployment.	(8)	CO3
3c)	Two project teams are running behind schedule. Team A updates progress weekly, while Team B updates monthly. Apply the Project Control Cycle concept to explain which team can detect and	(8)	CO3

correct problems earlier and why?

OR

3d)	A project manager is tracking a ride-sharing application using Earned Value Management (EVM). Explain how each of the following indicators can help in project decisions: Budgeted Cost for Work Scheduled (BCWS), Cost Variance (CV), Schedule Variance (SV), Cost Performance Index (CPI), and Schedule Performance Index (SPI). Give practical examples of decisions based on these indicators.	(8)	CO3

Question No. 4

4a)	Differentiate between risk identification, risk analysis, and risk monitoring with suitable examples from software development projects.	(8)	Co4

OR

4b)	Analyze how CASE tools support software project managers in planning, scheduling, and controlling software development activities.	(8)	Co4
4c)	Examine how the Risk Breakdown Structure (RBS) assists project managers in uncovering hidden or indirect risks within software development projects.	(8)	Co4

OR

4d)	Analyze the relationship between Baselines and Version Control in ensuring stability of project deliverables. Discuss how improper baseline management can lead to project delays, and illustrate with an example from software development.	(8)	Co4

Question No. 5

5a)	Break down how poor software quality leads to reduced customer satisfaction, higher maintenance effort, and a damaged business reputation in a real-world project situation.	(8)	CO5

OR

5b)	Classify the differences between process quality and product quality, and show how each contributes to assessing overall project quality.	(8)	CO5
5c)	Examine how project management factors (planning, scheduling, and risk management) directly affect software quality outcomes.	(8)	CO5

OR

5d)	Analyze how Software Quality Assurance (SQA) planning differs between small-scale and large-scale software projects. Explain how these differences affect the overall quality control and assurance process within the project.	(8)	CO5

····· End of question paper·····