



**K. K. Wagh Institute of Engineering Education & Research, Nashik**  
(An Autonomous Institute From A.Y. 2022-23)

SUMMER-2024	
Exam Seat No.:	
Academic Year:2023-2024	Semester:III
Class: SYMCA	Program:MCA
Branch Code:M.C.A.	Pattern:2022
Name of Course:Software Project Management and Testing	Course Code:MCA223005
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.

**Question No. 1 Attempt following Question**

- 1a) What is the fundamental purpose of Project Management, and how does it contribute to organizational success? (6) CO1

**Question No. 2 Attempt following Question**

- 2a) What are the primary factors considered as the basis for software effort estimation, and why are they crucial in the estimating process? (6) CO2

**Question No. 3 Attempt following Question**

- 3a) How do work products facilitate the review process during project control, and what characteristics make them effective for this purpose? (8) CO3

**OR**

- 3b) Could you explain the role of various visual tools such as Gantt charts, Slip charts, and timelines in visualizing project progress during project control? (8) CO3

- 3c) In instances where a project deviates from its target, what strategies can be employed to bring the project back on track, and what challenges may arise during this process? (8) CO3

**OR**

- 3d) How do software-specific risks differ from other types of project risks, and what techniques are commonly used for identifying and mitigating these risks? (8) CO3

**Question No. 4 Attempt following Question**

- 4a) Write test plan for coffee vending machine. (8) CO4

- 4b) Examine how the application of equivalence partitioning enhances the efficiency of Black-Box testing. (8) CO4
- 4c) List out the tabular difference between white box testing and black box testing. (8) CO4
- OR**
- 4d) How do positive and negative testing approaches influence software quality assurance, and what role does requirement-based testing play in ensuring comprehensive test coverage? (8) CO4

**Question No. 5 Attempt following Question**

- 5a) Differentiate Automated testing and manual testing in details. (8) CO5
- OR**
- 5b) Write down the key skills required and scope of automation within the testing process. (8) CO5
- 5c) Write a short note on (Any two) (8) CO5
- i. Cypress            ii. Testcafe            iii. Protractor

- OR**
- 5d) How does effective bug tracking contribute to the overall success of software testing processes? (8) CO5

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