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:VI
Class:TY	Program:B.Tech
Branch Code:INT	Pattern:2022
Name of Course:Software Engineering & Project Management	Course Code:INT223011
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 _02_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)	Compare the Waterfall Model and Incremental Model in terms of structure and application.	(6)	CO1
Question No. 2			
2a)	Describe the importance of project scheduling and explain how PERT helps in developing project schedules with an example.	(6)	CO2
Question No. 3			
3a)	Describe the concept of Test-Driven Development (TDD) and how it supports quality software.	(5)	CO3
	OR		
3b)	Explain the importance of refactoring in maintaining the quality of agile codebases.	(5)	CO3
3c)	Discuss how pair programming enhances collaboration and code quality in Agile teams.	(5)	CO3
	OR		
3d)	Explain the practice of Continuous Integration and its benefits in agile environments.	(5)	CO3
3e)	Differentiate between exploratory testing and scripted testing in the Agile context.	(6)	CO3
	OR		
3f)	Describe how agile practices contribute to faster and more adaptive development cycles.	(6)	CO3
Question No. 4			
4a)	Explain the process of controlling quality in software project management.	(5)	CO4
	OR		
4b)	Explain how risk identification and analysis contribute to IT project success.	(5)	CO4
4c)	Describe the main objectives of software engineering in a project environment.	(5)	CO4
	OR		

4d)	Examine the relationship between software engineering and project quality management, and how they influence each other.	(5)	CO4
4e)	Describe the concept of IT Risk Management and its relevance to software projects.	(6)	CO4

OR

4f)	Differentiate between Verification and Validation in Software Quality Assurance by examining their purpose and methods.	(6)	CO4

Question No. 5

5a)	Explain the major components of CASE tools and their functions.	(5)	CO5

OR

5b)	Distinguish between upper CASE, lower CASE, and integrated CASE tools.	(5)	CO5
5c)	Describe the impact of technology evolution on software engineering practices.	(5)	CO5

OR

5d)	Explain recent process trends in software engineering and how they influence development.	(5)	CO5
5e)	Examine the role of collaborative development in modern software projects and how it affects project outcomes.	(6)	CO5

OR

5f)	Investigate how Test-Driven Development improves both software design and testing processes.	(6)	CO5

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