CBCS SCHEME

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22MCA424

Fourth Semester MCA Degree Examination, June/July 2025
Agile Technology

Time: 3 hrs. Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M : Marks , L: Bloom's level , C: Course outcomes.

		Module – 1	M	L	C
Q.1	a.	Explain the core values of agile and how they contribute to the successful software development.	10	L2	CO1
	b.	Describe the lifecycle of an Extreme Programming (Xp) project. What are the critical phases and how do they contribute to the delivery of high – quality software?	10	L2	CO1
		OR			
Q.2	a.	Explain core concepts of extreme programming, such as pair programming test – driven development and continuous integration. How do these practices enhance software development quality and efficiency?	10	L2	CO1
	b.	Explain the concept of success in the context of Agile Methodologies. How does agile redefine success compare to traditional project management approaches?	10	L2	CO1
		Module – 2			
Q.3	a.	Discuss the factors an organization should consider when determining if Extreme Programming (Xp) is suitable for their development process. Include both potential benefits and challenges.	10	L2	CO1
	b.	Discuss the importance of pair programming in Xp. How does it contribute to knowledge sharing , code review and overall team effectiveness.	10	L2	CO1
		OR			
Q.4	a.	Analyse the role of root – cause analysis in Xp. How does it help in continuous improvement?	10	L2	CO2
	b.	Evaluate the significance of maintaining an energized work environment. What practices can be implemented to ensure this within an Xp team.	10	L2	CO2
		Module – 3			
Q.5	a.	Explain the importance of trust in Agile teams, particularly within the context of Xp. How can trust be built and maintained in a development team.	10	L2	CO2
	b.	Evaluate the role and structure of stand – up meetings in Xp. What benefits do they provide and what common pitfalls should be avoided.	10	L2	CO2

		OR			
Q.6	**a.**	Describe the purpose and process of an iteration demo in Xp. How it help in receiving feedback and guiding the next iteration?	**10**	**L2**	**CO2**
	b.	Explain the concept of a ten – minute build in Xp. Why is it important and what are the key components of achieving it?	**10**	**L2**	**CO2**
		Module – 4			
Q.7	**a.**	Describe the concept of Test – Driven Development (TDD) in Xp. How does TDD improve code quality and maintainability?	**10**	**L3**	**CO3**
	b.	Analyse the approach to handling incremental requirements in Xp. How does it ensure flexibility and responsiveness to change?	**10**	**L3**	**CO3**
		OR			
Q.8	**a.**	Discuss the planning Game in Xp. How does it facilitate effective planning and estimation within a team?	**10**	**L3**	**CO3**
	b.	Describe the process of release planning in Xp. What are its key components and how it contribute to project success?	**10**	**L3**	**CO3**
		Module – 5			
Q.9	**a.**	Explain the importance of understanding your project and describe how tuning and adapting processes are crucial in Agile. Provide examples of techniques used for both.	**10**	**L4**	**CO4**
	b.	Describe the concepts of working in small , reversible steps and failing fast in Agile. How do these approaches help in eliminating waste and enhancing flexibility?	**10**	**L4**	**CO4**
		OR			
Q.10	**a.**	Discuss the principle that only releasable code has value and how Agile teams focus on delivering business results. How do these principles guide development practices?	**10**	**L4**	**CO4**
	b.	Discuss the characteristics of great design and the relevance of universal design principles in Agile development. Provide examples of how these principles are applied.	**10**	**L4**	**CO4**

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