

**P.E.S. College of Engineering, Mandya - 571 401***(An Autonomous Institution affiliated to VTU, Belagavi)***Eighth Semester, B.E. - Computer Science and Engineering****Semester End Examination; July - 2023****Agile Technologies**

Time: 3 hrs

Max. Marks: 100

Course Outcomes*The Students will be able to:**CO1: Demonstrate a systematic understanding of current agile techniques and practices used in industry.**CO2: Apply industry standard agile techniques in develop software in a team.**CO3: Use group and individual retrospectives to critically evaluate and propose improvements in developing software in a professional context.**CO4: Apply concepts of XP and EVE in develop software.**CO5: Managing the changes applying different testing techniques.***Note: I) PART - A is compulsory. Two marks for each question.****II) PART - B: Answer any Two sub questions (from a, b, c) for a Maximum of 18 marks from each unit.**

Q. No.	Questions	Marks	BLs	COs	POs
I : PART - A		10			
1 a.	Define the following terms:	2	L1	CO1	PO1
	i) Iterative development ii) Iteration time boxing				
b.	List agile manifesto or objectives of agile.	2	L1	CO2	PO1
c.	List any two common mistakes in agile methodology.	2	L1	CO3	PO1
d.	Define extreme programming.	2	L1	CO4	PO1
e.	List two concrete practices for testing on agile teams.	2	L1	CO5	PO2
II : PART - B		90			
UNIT - I		18			
2 a.	Differentiate between predictable manufacturing and new product development.	9	L2	CO1	PO1
b.	With a neat diagram, explain iterative and incremental development.	9	L2	CO1	PO1
c.	Explain early "Top Ten" high level requirements and skill full analysis.	9	L2	CO1	PO1
UNIT - II		18			
3 a.	Explain the different agile principles in detail.	9	L2	CO2	PO1
b.	Illustrate the different key motivations for iterative development.	9	L2	CO2	PO1
c.	Explain the different problems associated with the waterfall model.	9	L2	CO2	PO1
UNIT - III		18			
4 a.	Explain scrum classification in terms of cycles and ceremony. Elaborate phases of scrum lifecycle.	9	L2	CO3	PO1
b.	Discuss the core practices of scrum.	9	L2	CO3	PO11

- c. Identify and elaborate the essential scrum values required to adopt in efficient development using agile methodology. 9 L2 CO3 PO11

UNIT - IV

18

- 5 a. Explain extreme programming lifecycle phases. 9 L2 CO4 PO11
- b. Define unified process. Classify UP in terms of cycles and ceremony and Cockburn classification. 9 L2 CO4 PO11
- c. Illustrate EVO lifecycle in detail. 9 L2 CO4 PO11

UNIT - V

18

- 6 a. List and explain nine principles for testing on agile teams. 9 L2 CO5 PO1
- b. Discuss six practices for testing on agile teams. 9 L2 CO5 PO2
- c. Explain agile testing lifecycle. 9 L2 CO5 PO2

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