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P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belagavi)
Fifth Semester, B.E. - Computer Science and Engineering
Semester End Examination; February / March - 2022
Software Engineering

Time: 3 hrs   *Max. Marks: 100*

Course Outcomes

The Students will be able to:
CO1: Explore the various types of software process.
CO2: Elaborate the importance of software development.
CO3: Asses the significance of software engineering.
CO4: Compare different Software Development methods.
CO5: Identify the different forms of Software Development.

<u>*Note:*</u> *I) PART - A is compulsory. **Two** marks for each question.*
*II) PART - B: Answer any <u>**Two**</u> sub questions (from a, b, c) for Maximum of **18 marks** from each unit.*

Q. No.	Questions	Marks	BLs	COs	POs
	I : PART - A	**10**			
I a.	What are the essential attributes of good software?	2	L1	CO1	PO1,2
b.	Define scenarios. List components of a scenario.	2	L1	CO2	PO1,2,4
c.	List four Architectural Views.	2	L1	CO3	PO2,4,5
d.	Define Testing. Write three advantages of software inspection over testing.	2	L1	CO4	PO1,2,3
e.	List all the risk indicators used in risk management.	2	L1	CO5	PO2,4,5
	II : PART - B	**90**			
	UNIT - I	**18**			
1 a.	Write a block diagram for illustrating incremental development model. State atleast two benefits and the problems in incremental development.	9	L2	CO1	PO2,3,4
b.	List and explain software engineering diversity used in different types of applications.	9	L2	CO1	PO2,3
c.	With a neat diagram, describe the phases of Rational Unified Process (RUP) also list three perspectives of RUP.	9	L3	CO1	PO2,3
	UNIT - II	**18**			
2 a.	List and explain extreme programming practices.	9	L1,2	CO2	PO1,2,3
b.	Write the structure of requirement document as suggested by IEEE standards.	9	L3	CO2	PO2,3,4
c.	Explain requirements elicitation and analysis process with a neat diagram.	9	L2	CO2	PO1,2,3

	UNIT - III	**18**			
3 a.	With the help of a neat diagram, illustrate the working of microwave oven, also list all states and stimuli for the same.	9	L3	CO3	PO2,3,4
b.	With neat block diagram, explain; i) Repository architecture	9	L2	CO3	PO2,3
	ii) Client server architecture for a film library				
c.	Draw a context model for patient management system. How the interactions are modeled?	9	L2	CO3	PO3,4
	UNIT - IV	**18**			
4 a.	Draw a sequence diagram to describe data collection used in weather information system and explain the sequence of interactions for the same.	9	L2	CO4	PO2,3,4
b.	Define TDD (Test Driven Development). With neat diagram, explain TDD activities along with its benefits.	9	L2	CO4	PO1,2,3
c.	With suitable block diagram, explain six stages of acceptance testing process.	9	L3	CO4	PO2,3,4
	UNIT - V	**18**			
5 a.	With neat diagram, briefly explain change management process.	9	L2	CO5	PO3,4
b.	List all configuration management terminologies (CM) used in configuration management.	9	L2	CO5	PO1,2
c.	What is risk management? With neat diagram, discuss risk management process also list any six types of risk strategies for managing risk.	9	L2	CO5	PO1,23,4

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