Q. Code:786469

Reg. No. | | | | | | | | | | | | | |

B.E./ B.TECH. DEGREE EXAMINATIONS, MAY 2024

Fourth Semester

IT18404 –SOFTWARE ENGINEERING METHODOLOGIES

(Information Technology)

(Regulation2018/2018A)

TIME:3 HOURS **MAX. MARKS: 100**

COURSE OUTCOMES	STATEMENT	RBT LEVEL
CO 1	Develop real-world software development projects.	**4**
CO 2	Assess software Projects responding to change and involving customer in the development process.	**5**
CO 3	Compare different software engineering methodologies.	**5**
CO 4	Assess the roles of software process.	**5**
CO 5	Adapt agile methodology in real world software engineering projects.	**6**

PART- A(10x2=20Marks)

(Answer all Questions)

		CO	RBT LEVEL
1.	Interpret the statement- "Software doesn't wear out".	**1**	**3**
2.	Identify the need for changing the framework activity as the nature of the project changes.	**1**	**2**
3.	Compare and contrast event driven model and data driven model.	**2**	**5**
4.	Apply generalization for the class "Doctor" to show the relationship between classes.	**2**	**3**
5.	Distinguish alpha and beta testing.	**3**	**4**
6.	List out the user interface design models.	**3**	**4**
7.	Point out the way of organizing development team in Agile.	**4**	**4**
8.	Summarize on the practices in extreme programming.	**4**	**2**
9.	Develop a set of guidelines and best practices for promoting a culture of software reuse within a development team.	**5**	**3**
10.	Analyze the interactions and dependencies between subsystems in a System of Systems and their impact on overall system behavior.	**5**	**4**

PART- B (5x 14=70Marks)

		Marks	CO	RBT LEVEL
11. (a)	Select the most appropriate software process model that might be used as a basis for managing the development of the following systems. Explain your	**(14)**	**1**	**3**

answer according to the type of system being developed.

i) A cab booking system.

ii) ERP.

(OR)

(b)	Identify the stages integral to uncovering and recording software requirements, and elucidate each step with examples.	**(14)**	**1**	**3**
12. (a)	Identify the use cases & actors and draw the use case diagram for Event hall booking system.	**(14)**	**2**	**3**

(OR)

(b)	Discover the activities involved in an activity model of the insulin pump's operation and draw activity diagram.	**(14)**	**2**	**3**
13. (a)	Employ Model View Controller pattern for interaction management in many web-based systems and also supported by most language frameworks.	**(14)**	**3**	**3**

(OR)

(b)	Examine the worst user interface that you have ever worked with and critique it relative to the concepts you studied. Examine the best user interface that you have ever worked with and critique it relative to the concepts you studied.	**(14)**	**3**	**3**
14. (a)	Justify the characteristics needed for a successful product owner.	**(14)**	**4**	**5**

(OR)

(b)	Summarize the critical characteristics that should be maintained in prioritizing a list of the outstanding work necessary to bring the product to life.	**(14)**	**4**	**5**
15. (a)	Analyze the architecture that handle the massive volume of video streaming requests efficiently and employ micro services architecture, containerization, and various distributed data stores to ensure high availability and fault tolerance.	**(14)**	**5**	**4**
(b)	Evaluate the scalability and performance considerations of a service-oriented system compared to a traditional centralized architecture.	**(14)**	**5**	**4**

PART- C (1x 10=10Marks)

(Q.No.16 is compulsory)

		Marks	CO	RBT LEVEL
16.	Develop an interactive web User Interface (UI) design with respect to MVC for Snapchat application .	**(10)**	**3**	**3**

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