14 JUL 2023

Reg. No.												

Question Paper Code	12003

M.E. / M.Tech. - DEGREE EXAMINATIONS, APRIL/MAY 2023

Second Semester

M.E. - Computer Science and Engineering (with Specialization in Networks)

20PCNEL205 - ADVANCED SOFTWARE ENGINEERING

(Regulations 2020)

Duration: 3 Hours | Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

		Marks, K-Level, CO
1.	What is the advantage of adhering to Life Cycle Models for Software?	*2,K1,CO1*
2.	State the need for Software Configuration Review.	*2,K1,CO1*
3.	List the characteristics of Good SRS.	*2,K1,CO2*
4.	How does the Data Flow Diagram help in design of Software system?	*2,K2,CO2*
5.	Name the commonly used architectural styles.	*2,K1,CO3*
6.	What is the use of Fan-in and Fan-out?	*2,K1,CO3*
7.	What errors are commonly found during Unit Testing?	*2,K1,CO4*
8.	Distinguish between Stress and Load Testing.	*2,K2,CO4*
9.	What is continuous Integration?	*2,K1,CO5*
10.	List the disadvantages of DevOps.	*2,K1,CO5*

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11.	a)	Compare Waterfall and Spiral Software Development life cycle models.	*13,K2,CO1*
		OR	
	b)	Describe the steps involved in Project scheduling Process, Project Timeline chart and Task Network.	*13,K2,CO1*
12.	a)	Explain in detail about Requirements Engineering Process with neat diagram.	*13,K2,CO2*
		OR	
	b)	What is the purpose of DFD? What are the components of DFD? Construct DFD for the following system. An online shopping system for xyz provides many services and benefits to its members and staffs.	*13,K2,CO2*

13. a) Explain in detail about the Model-view-Controller architectural design pattern with example and Highlights its advantages. *13,K2,CO3*

OR

b) Explain in detail about types of Cohesion and coupling with example. *13,K2,CO3*

14. a) Explain Equivalence class Partitioning with suitable example. *13,K2,CO4*

OR

b) Explain in detail about Integration testing with example. *13,K2,CO4*

15. a) Elaborate the DevOps Methodology. *13,K2,CO5*

OR

b) (i) Explain in detail about deployment pipeline with diagram. *7,K2,CO5*

(ii) Outline the process of using Cloud as a Platform for Development and Deployment. *6,K2,CO*

PART - C (1 × 15 = 15 Marks)

16. a) Model a Class Diagram for the following scenario. *15,K3,CO3*

"Happy Life" is a Life Insurance company that offers various policies to its customers. The Company Manipulates and maintains the details of various policies, Policy holders, Agents and transactions.

OR

b) Model a Use case Diagram for a Library Management System. State the Functional Requirements you are considering. *15,K3,CO3*