Code No: R203205C **R20** SET -1

III B. Tech II Semester Regular Examinations, JULY-2023
OBJECT ORIENTED ANALYSIS AND DESIGN
(Com. To CSE & IT)

Time: 3 hours   Max. Marks: 70

Answer any **FIVE** Questions **ONE** Question from **Each unit**
All Questions Carry Equal Marks
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UNIT-I

1. a) Why software is inherently complex? Explain in detail.   [7M]
    b) What are requirements for the satellite navigation system? Explain.   [7M]
                                    (OR)
2. a) Explain about the meaning of design. Describe the steps in designing process. [7M]
    b) Discuss about validating the proposed system architecture of satellite   [7M]
        navigation system.

UNIT-II

3. a) Describe common modeling techniques of relationships.   [7M]
    b) Explain about determining system use cases of the train traffic management [7M]
        system.
                                    (OR)
4. a) Briefly discuss about the conceptual model of the UML.   [7M]
    b) Discuss about defining the TTMS architecture.   [7M]

UNIT-III

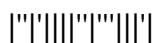5. a) How to identify classes in class diagrams? Explain.   [7M]
    b) Discuss about the elaboration phase of Cryptanalysis.   [7M]
                                    (OR)
6. a) Describe common modeling techniques of Packages.   [7M]
    b) What are requirements of Cryptanalysis? Explain about analysis of knowledge [7M]
        sources.

UNIT-IV

7. a) What are interaction diagrams? Explain with examples.   [7M]
    b) Describe client and implementation views of Vacation Tracking System.   [7M]
                                    (OR)
8. a) Explain common modeling techniques of activity diagrams.   [7M]
    b) Describe service data objects and primary key generation of Vacation Tracking [7M]
        System.

UNIT-V

9. a) "State machines are used for behavioral modeling". . Justify.   [7M]
    b) Discuss about scenarios of Weather Monitoring System.   [7M]
                                    (OR)
10. a) Describe deployment diagrams with suitable examples.   [7M]
    b) Discuss about requirements and post transition of Weather Monitoring System. [7M]

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SET -2

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UNIT-I
1. a) What are categories of analysis and design methods? Explain. [7M]
   b) Explain about allocating nonfunctional requirements and specifying interfaces in satellite-based navigation. [7M]

(OR)

2. a) Discuss about the canonical form of a complex system. [7M]
   b) How to determine mission use cases of satellite-based navigation? Explain [7M]

UNIT-II
3. a) Discuss various phases of software development life cycle. [7M]
   b) Explain about Key Abstractions and Mechanisms of TTMS. [7M]

(OR)

4. a) Explain common modeling techniques of classes. [7M]
   b) Describe train schedule planning of TTMS. [7M]

UNIT-III
5. a) What is an object diagram? Explain identifying objects in object diagrams. [7M]
   b) Discuss about designing the controller of Cryptanalysis. [7M]

(OR)

6. a) What are advanced relationships in UML? Explain. [7M]
   b) Describe dependencies and affirmations of Cryptanalysis. [7M]

UNIT-IV
7. a) Explain the importance use case diagram with example. [7M]
   b) Discuss about use case view of Vacation Tracking System. [7M]

(OR)

8. a) Describe terms and notations of use cases with suitable examples.. [7M]
   b) Explain the inception phase of Vacation Tracking System. [7M]

UNIT-V
9. a) What are common modeling techniques of Component diagrams? Explain. [7M]
   b) Describe sensor mechanism and display mechanism of Weather Monitoring System. [7M]

(OR)

10. a) How events and signals are useful in UML? Explain. [7M]
    b) Discuss about use cases of Weather Monitoring System. [7M]

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UNIT-I

1.	a)	What are the five attributes of a complex system? Explain.	[7M]
	b)	Draw and explain the white-box activity diagram for control launch of satellite-based navigation	[7M]

(OR)

2.	a)	Explain about arithmetic and object-oriented decompositions.	[7M]
	b)	Describe the satellite navigation system's post transition.	[7M]

UNIT-II

3.	a)	What are basic building blocks of the UML? Explain.	[7M]
	b)	Discuss about Subsystem Specification of TTMS.	[7M]

(OR)

4.	a)	Explain about classification of UML diagrams in detail.	[7M]
	b)	Describe message passing in TTMS with neat diagrams.	[7M]

UNIT-III

5.	a)	What are common modeling techniques of advanced relationships? Explain.	[7M]
	b)	Describe designing the knowledge sources of Cryptanalysis.	[7M]

(OR)

6.	a)	Write and explain terms and concepts of interfaces, types and roles.	[7M]
	b)	Discuss about post transition of Cryptanalysis.	[7M]

UNIT-IV

7.	a)	Explain about terms and concepts of activity diagrams.	[7M]
	b)	Describe entities of Vacation Tracking System.	[7M]

(OR)

8.	a)	What are common modeling techniques of interactions? Explain.	[7M]
	b)	Explain the web pages and the user interface of Vacation Tracking System.	[7M]

UNIT-V

9.	a)	Discuss about state chart diagrams in detail.	[7M]
	b)	Discuss about the frame mechanism of Weather Monitoring System.	[7M]

(OR)

10.	a)	Describe common modeling techniques of deployment diagrams.	[7M]
	b)	What are Weather Monitoring System Use Cases? Explain.	[7M]

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UNIT-I

1.	a)	Discuss about the roles of abstraction and hierarchy in detail.	[7M]
	b)	Describe validating the proposed system architecture of satellite-based navigation	[7M]

(OR)

2.	a)	Explain about the structure of complex systems.	[7M]
	b)	Describe stipulating the system architecture and its deployment.	[7M]

UNIT-II

3.	a)	What is modeling? Explain the importance of modeling.	[7M]
	b)	Discuss about analyzing system functionality of TTMS.	[7M]

(OR)

4.	a)	Explain about relationships in the UML with examples.	[7M]
	b)	What are requirements for the Train Traffic Management System? Explain.	[7M]

UNIT-III

5.	a)	Describe terms and concepts of advanced classes.	[7M]
	b)	Briefly explain about inception phase of Cryptanalysis.	[7M]

(OR)

6.	a)	Explain common modeling techniques of class and object diagrams.	[9M]
	b)	Describe blackboard objects of Cryptanalysis.	[5M]

UNIT-IV

7.	a)	Explain about common modeling techniques of Use cases.	[7M]
	b)	Discuss about analysis and design model of Vacation Tracking System.	[7M]

(OR)

8.	a)	Describe activity diagrams for School Management System.	[7M]
	b)	Explain logical and process views of Vacation Tracking System.	[7M]

UNIT-V

9.	a)	Discuss about terms and concepts of threads, time and space.	[7M]
	b)	Explain about defining the Problem Boundaries of Weather Monitoring System.	[7M]

(OR)

10.	a)	Explain about component diagrams in detail.	[7M]
	b)	Describe the user interface mechanism of Weather Monitoring System.	[7M]

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