Code No. : 6357/N

FACULTY OF INFORMATICS
B.E. 3/4 (I.T.) II Semester (New) (Supple.)
Examination, December 2009
OBJECT ORIENTED SYSTEM DEVELOPMENT

Time: 3 Hours] [Max. Marks: 75

*Note : Answer **all** questions from Part A. Answer **any five** questions from Part **B**.*

PART – A **(25 Marks)**

1. What is UML ? Where can the UML be used ? **3**
2. Distinguish between 'Sequence diagram' and "Collaboration diagram". **3**
3. Define the following terms : a) use case b) actor. **2**
4. Name standard stereo types that apply to 'Active Classes'. **2**
5. Mention any two advantages of component diagram. **2**
6. Describe about 'Deployment Model'. **3**
7. What are the benefits of 'Unified Process'? Explain. **3**
8. What is an Iteration? **2**
9. What is a 'Business Model' ? Explain. **2**
10. What are the core work flows ? **3**

PART – B **(50 Marks)**

11. Describe the basic structural modeling with the help of **10**

    A) Classes

    B) Relationships

    C) Common mechanisms

    D) Diagrams.

12. a) Discuss the following concepts of activity diagrams : Transitions, Branching, Fork and Join, Swim lanes. 6

b) What are state machines ? Explain-States and Transitions. 4

13. a) Explain the concepts of - "patterns" and "frame works". 4

b) Explain the common uses and contents of deployment diagram. 6

14. a) Discuss the life of the 'unified process'. 6

b) Describe how it is useful to formalize the use-case descriptions. 4

15. a) Give a brief description of how an analysis model can be compared with a design model. 5

b) Discuss the work flow in implementation, including the participating workers and their activities. 5

16. a) What is the difference between an event and a guard ? 5

b) What is the difference between an event and an action ? 5

17. Write short notes on the following :

a) Class diagram 3

b) Collaboration 4

c) Worker. 3

Code No. : 5290/M

FACULTY OF INFORMATICS
B.E. 3/4 (IT) II Semester (Main) Examination, May/June 2012
OBJECT ORIENTED SYSTEM DEVELOPMENT

Time: 3 Hours] [Max. Marks : 75

Note : *Answer* ***all*** *questions from Part* ***A****. Answer* ***any five*** *questions from Part* ***B****.*

PART – A **25 Marks**

1. What is UML and where can UML be used ? 2
2. Depict a class diagram and explain briefly. 3
3. Sketch a state chart diagram and explain briefly. 2
4. Define Interface and Package. 3
5. Mention any two advantages of component diagram. 2
6. What is an artifact ? 2
7. Enumerate the input and output of requirement analysis. 3
8. What are the benefits of 'unified process' ? Explain briefly. 3
9. What is a 'Business Model' ? Explain briefly. 2
10. Name the phases of unified software development process and explain briefly. 3

PART – B **(5×10=50 Marks)**

11. a) Explain class diagram with an example. 5
    b) Listout common modeling techniques for a class diagram. 5

(This paper contains 2 pages)

P.T.O.

12. a) Briefly explain 4 common mechanisms that apply consistently throughout the language. 4

    b) Explain forward and reverse engineer for a class diagram. 6

13. Explain about the following : 10

    a) Use case diagram.

    b) Interaction diagram.

    c) Collaboration diagram.

14. a) Explain activity diagram with swimlanes and illustrate with an example. 6

    b) Discuss patterns. 4

15. a) Trace the development of an analysis model and a design model. 5

    b) Explain how class diagrams are generated using other relevant UML diagrams. 5

16. a) Illustrate conversion of requirements to use cases. 5

    b) Explain iterative and incremental process. 5

17. Write short notes on : 10

    a) Systems and models.

    b) Data transfer between objects and databases.

    c) Component design.

Code No. 9157 / M

FACULTY OF INFORMATICS

B.E. 3/4 (I.T.) II - Semester (Main) Examination, May / June 2015

Subject : Object Oriented System Development

Time : 3 Hours **Max. Marks: 75**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (25 Marks)

1 Write the difference between Iteration and Incrementation. (3)
2 What are the different factors that influence the architecture of a system? (2)
3 Define use case model. What is its use? (2)
4 Define Testing. (2)
5 "UML is a language for construction". Justify (2)
6 Define the following Relationships with notations. (3)
(a) Dependency (b) Association (c) Realization
7 Define Interface and package with notations. (3)
8 Define composite and history states of a state machine. (3)
9 Write the difference between sequence and collaboration diagrams. (2)
10 Define component and deployment diagrams. (3)

PART – B (50 Marks)

11 (a) Explain the life cycle of unified process. (5)
(b) Write steps for software development process. (5)

12 Explain requirements capture steps with an example. (10)

13 List and briefly explain the elements of UML. (10)

14 (a) Define a class and explain the concept of classes and their relationships with an example. (5)
(b) Write steps to implement forward engineering. (5)

15 Explain activity diagram with swim lanes and synchronization bars and illustrate with an example. (10)

16 (a) Define use case and elements present in use case diagrams. (5)
(b) Explain different stereo types that apply to use cases. (5)

17 Define the following:
(a) Deployment collaboration (3)
(b) Patterns and frameworks (4)
(c) Systems and models (3)

*****

Code No. 2212

FACULTY OF INFORMATICS

B.E. 3/4 (IT) II Semester (Suppl.) Examination, January 2013

Subject: Object Oriented System Development

Max. Marks: 75

Time: 3 Hours

Note: 1. Answer all questions from Part A. Answer any five questions from Part B.

PART – A (25 Marks)

1. What is UML and where can UML be used? (2)
2. Discuss about "Adornments". (2)
3. Define the concept of "dependency relationship". (3)
4. Define events and signals. (2)
5. Explain interaction diagram. (3)
6. What are the benefits of 'unified process'? Explain. (3)
7. Enumerate the input and output of requirement analysis. (3)
8. What is an architecture centric process? (2)
9. List the responsibilities of a component engineer in implementation model. (3)
10. Explain capturing requirements with respect to use cases.

PART – B (50 Marks)

11. Describe the basic structural modeling with help of (10)
    (i) Classes ii) Relationships (iii) Common mechanisms (iv) Diagrams

12.(a) Summarize the modeling techniques used for use case diagram and state chart diagram. (5)
   (b) Draw use case diagram for library information system of a college and state your assumptions. (5)

13.(a) Explain parts of transition in detail. (5)
   (b) Explain the following terms in detail showing which one is most general and most specific.
   (i) Aggregation (ii) Association (iii) Composition

14. Differentiate between
    (a) Process and thread (3)
    (b) Time and space (3)
    (c) Sequential diagram and collaboration diagram (4)

15.(a) Discuss about the phased development process in detail. (5)
   (b) What is an artifact diagram and explain in what way deployment diagrams are useful. (5)

16.(a) What is software architecture and why we need it? (4)
   (b) What do you mean by iterative and incremental software development? Can they be used to mitigate risk? (6)

17. Write short notes on:
    (a) Core workflows (3)
    (b) Roles of implementation phase and its core workflows. (4)
    (c) Difference between system and model. (3)

****