Code: 9A05601

R09

B.Tech III Year II Semester (R09) Regular & Supplementary Examinations June 2014

OBJECT ORIENTED ANALYSIS & DESIGN

(Common to CSE, IT & CSS)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

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1 Explain in detail about UML Language.

2 Explain about the following:
(a) Principles of modeling.
(b) Use case view of a system.

3 Define object diagram? Explain about the graphical representation of object diagram of UML in detail.

4 Explain and draw the collaboration diagram for while dialing use case for cellular phone connection.

5 (a) What are the contents, common properties and common uses of use case diagrams?
(b) Enumerate the steps to model the context of a system.

6 Write a short note on the following:
(a) Events and signals.
(b) States and state machines.
(c) Processes and threads.
(d) Time and space.

7 (a) Draw a component diagram for the library system and explain.
(b) Draw a class diagram of business objects in the design model and explain.

8 What are the various object participating in the library information system? Explain the object diagram that is associated with various interactions with a neat diagram.

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Code: 9A05601

R09

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2014/2015

OBJECT ORIENTED ANALYSIS & DESIGN

(Common to CSE, IT and CSS)

Time: 3 hours Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

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1 Explain about the modeling of system architecture in detail.

2 (a) Explain about the steps for modeling the 'comment' with an example.
(b) Explain about the steps for modeling new building blocks.

3 Define object diagram. Explain about the graphical representation of an object diagram of UML in detail.

4 Explain about the following:
(a) Collaboration in interaction.
(b) Sequencing in interaction.

5 (a) Draw a use case diagram that depicts the context of a credit card validation system. Explain briefly.
(b) Draw the UML diagram to model the requirements of a system. Explain briefly.

6 (a) Explain the need of synchronization along with the three properties.
(b) Enumerate the steps in modeling the multiple flows of control with the help of an example.

7 (a) Define component. What are the differences between components and classes? How are components and interfaces related?
(b) What are the properties of components?
(c) What are standard stereotypes that apply to components?

8 Explain the two interaction diagrams for "Issue of a book" and "renewal of a book" operations in a library.

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Code :R7320506

1

III B.Tech II Semester(R07) Regular & Supplementary Examinations, April/May 2011
OBJECT ORIENTED ANALYSIS & DESIGN
(Common to Computer Science & Engineering, Information Technology, Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

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1. Explain How the UML addresses four aims of Modeling?
2. (a) Explain about the steps for Modeling the Primitive things in detail.
   (b) Explain about the types of Relation ships in UML with example.
3. Explain about the steps involved in modeling a Logical Database Schema with examples.
4. Explain about the steps involved in modeling the flow of control.
5. (a) Draw a use case diagram that depicts the context of a credit card validation system. Explain briefly.
   (b) Draw the UML diagram to model the requirements of a system. Explain briefly.
6. (a) What is a state? What are the several parts of States?
   (b) What is a transition? Explain the several parts of Transitions.
   (c) Enumerate the steps to model the life time of an Object.
7. Explain the common modeling techniques of deployment.
8. (a) Draw a class diagram showing architectural overview of the library system.
   (b) Explain "Issuing of a book" operation using collaboration diagram.

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Code :R7320506 2

III B.Tech II Semester(R07) Regular & Supplementary Examinations, April/May 2011
OBJECT ORIENTED ANALYSIS & DESIGN
(Common to Computer Science & Engineering, Information Technology, Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

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1. Explain in detail about UML Language.
2. Explain about Association names, Roles, Multiplicity and Aggregation With examples.
3. Explain about the steps involved in modeling to Forward Engineer a Class diagram with examples.
4. Explain about the following:
   (a) Procedural sequencing
   (b) Steps involved in modeling the fl ow of control
5. (a) Draw a use case diagram to model the behavior of a cellular phone. Explain briefl y.
   (b) What are the relations ships that can be possible in between the actors and in between the uses cases? Explain with an example.
6. (a) Diff erentiate between a Process and a thread.
   (b) What are the two standard stereotypes that apply to active class?
   (c) Explain and model the behavior of an ATM machine with the help of a statechart diagram.
7. (a) Explain how forward engineering and reverse engineering can be done using a component diagram.
   (b) Draw a well structured component diagram for illustrating a simple application of client-server system and explain the properties.
8. (a) What are the packages in the Library system? Explain.
   (b) Draw a sequence diagram for the use case Lend Item and explain.

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Code :R7320506 3

III B.Tech II Semester(R07) Regular & Supplementary Examinations, April/May 2011
OBJECT ORIENTED ANALYSIS & DESIGN
(Common to Computer Science & Engineering, Information Technology, Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 80

Answer any FIVE questions
All questions carry equal marks

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1. Explain about Conceptual model of UML in detail.
2. Explain about the steps for modeling the Structural Relationships with example.
3. Define Object Diagram. Explain about the Graphical Representation of object diagram of UML in detail.
4. Define Interaction diagram. Explain about the graphical representation of Interaction diagram of UML in detail.
5. Explain how a use case diagram is forward engineered and reverse engineered.
6. (a) Enumerate the steps to model the life time of an object with an example.
   (b) Discuss sequential substates and concurrent substates with an example.
7. (a) Enumerate the steps to reverse engineer a deployment diagram.
   (b) Enumerate the steps to model a physical database schema.
   (c) Explain the properties of a component diagram.
8. What are the various object participating in the library information system? Explain the object diagram that is associated with various interactions with a neat diagram.

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Code :R7320506 4

III B.Tech II Semester(R07) Regular & Supplementary Examinations, April/May 2011
OBJECT ORIENTED ANALYSIS & DESIGN
(Common to Computer Science & Engineering, Information Technology, Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 80

Answer any FIVE questions
All questions carry equal marks
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1. Explain about Software development Life cycle in detail.
2. Explain about notes, Stereotype, Tagged Values and Constraints with examples.
3. Explain about the steps involved in modeling the Object Structures With examples.
4. Explain about the steps involved in modeling the flow of control by time ordering.
5. (a) Enumerate the properties of a well-structural use case.
   (b) A retail system will interact with customers who place and track orders. Give UML diagram that uses various use cases.
6. (a) Explain the need of synchronization along with the three properties.
   (b) Enumerate the steps in modeling the multiple flows of control with the help of an example.
7. (a) Enumerate the steps to model adaptable systems. Illustrate with an example.
   (b) Enumerate the steps to model an executable release. Illustrate with an example.
   (c) What are the common uses of component diagrams?
8. What are the states that are associated with Borrowing a book from a library system? Draw the state chart diagram that explains various states of a book during the processing.

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Code: 9A05601

III B. Tech II Semester (R09) Regular Examinations, April/May 2012

OBJECT ORIENTED ANALYSIS & DESIGN

(Common to Computer Science & Engineering, Information Technology & Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 (a) Explain about the common division mechanisms of UML in detail.
(b) Explain about behavioral things of UML in detail.

2 Define classifier. Explain in detail about different kinds of classifiers provided by UML.

3 Define class diagram. Explain about the graphical representation of class diagram with example.

4 Explain and draw the sequence diagram for ticket reservation use case in case of an online ticket reservation system.

5 What is a use case? Draw a use case diagram for a core banking application. Explain the same by identity various actors, use cases and relationships.

6 Write a short note on the common modeling techniques of time and space.

7 (a) Define a node. State the differences between nodes and components. Explain how nodes can be organized.
(b) Enumerate the steps to model the source code using components.

8 Your college library issues books to the staff and students. The student and staff do return the books after some time. Draw the class diagram required for the process also draw state chart diagram for any object and also draw component diagram and explain.

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Code: 9A05601

2

III B. Tech II Semester (R09) Regular Examinations, April/May 2012

OBJECT ORIENTED ANALYSIS & DESIGN

(Common to Computer Science & Engineering, Information Technology & Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 Define an object flow. Explain briefly how objects are involved in the flow of control associate with an activity diagram.

2 Write a short note on the following:
a) Sending and receiving events.
b) Time and change events.
c) Call event.
d) Signal event.

3 (a) Enumerate the steps to model the client-server systems.
(b) What are the properties of components and component diagrams? Explain briefly.

4 Explain the two interaction diagrams for “Issue of a Book” and “Renewal of a Book” operations.

5 Define modeling. Why do we model? What we can achieve through modeling?

6 Explain about association names, roles, multiplicity and aggregation with examples.

7 Explain and draw the class diagram for an ATM bank system.

8 Explain about the following:
(a) Procedural sequencing.
(b) Steps involved in modeling the flow of control.

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Code: 9A05601

3

III B. Tech II Semester (R09) Regular Examinations, April/May 2012

OBJECT ORIENTED ANALYSIS & DESIGN

(Common to Computer Science & Engineering, Information Technology & Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 Explain about the following:
(a) Process view.
(b) Package.
(c) Interface.
(d) Transition phase.

2 (a) Explain about the class diagrams with examples in detail.
(b) Explain about the component diagrams with examples in detail.

3 Explain about different types of relationships in class and object diagrams with examples.

4 Explain and draw the collaboration diagram for lend article use case for library management system.

5 (a) What is the purpose of a synchronization bar? How are forking and joining used in activity diagram? Illustrate with a neat diagram.
(b) Draw activity diagram to inform a person when a loan is due and explain.

6 (a) Differentiate between a process and a thread.
(b) What are the two standard stereotypes that apply to active class?
(c) Explain and model the behavior of an ATM machine with the help of a state chart diagram.

7 Enumerate the steps to model the following. Illustrate UML diagrams and explain briefly:
a) Modeling processes and devices.
b) Modeling distribution of components.

8 (a) What are the packages in the library system? Explain.
(b) Draw a sequence diagram for the use case lend item and explain.

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Code: 9A05601

4

III B. Tech II Semester (R09) Regular Examinations, April/May 2012

OBJECT ORIENTED ANALYSIS & DESIGN

(Common to Computer Science & Engineering, Information Technology & Computer Science & Systems Engineering)

Time: 3 hours Max Marks: 70

Answer any FIVE questions
All questions carry equal marks
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1 (a) What are use case diagrams? Explain the properties and importance of use case diagrams.
(b) Draw an extended use case diagram for the soda machine example depicting the 'Extend', 'Include' and generalization relationships.

2 (a) Compare and contrast the real-time system with the distributed system.
(b) Enumerate the steps to model the following:
(i) Family of signals.
(ii) Exceptions.

3 (a) What are the properties of a well-structured component diagram?
(b) What are the contents, common properties and common uses of component diagrams? Explain briefly.

4 (a) Describe the various activities that are performed by various stake holders in a library information system.
(b) Draw and explain the collaboration diagram for the "Add Title" use case.

5 (a) Differentiate between process and deployment view of a system in detail.
(b) List out and explain the four phases of SDLC.

6 (a) Differentiate between class and object diagrams of UML.
(b) Differentiate between use case diagram and component diagram in detail.

7 Explain about the following:
(a) Forward engineer of a class diagram.
(b) Steps involved in modeling simple collaborations with examples.

8 (a) Explain about links and associations in detail.
(b) Explain about several kinds of actions model by UML.

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