Code: 9A05601

1

B. Tech III Year II Semester (R09) Regular & Supplementary Examinations, April/May 2013

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 about principles of modeling in detail.

2 (a) Explain about the steps for modeling the distribution and responsibilities with example.
(b) Explain about the steps for modeling the non software things.

3 Explain about the different ways of using a class diagram when modeling the static design view of a system.

4 Explain about the following:
(a) Messages.
(b) Links.
(c) Sequencing.

5 (a) What is a use case? How it differs from the flow of events?
(b) What are the various flows of events in UML?
(c) Enumerate the steps to model the behavior of an element with an example.

6 Write a short note on the following:
(a) History states.
(b) Sub states.
(c) Sequential sub states.
(d) Concurrent sub states.

7 (a) Enumerate the steps to forward engineer and to reverse engineer a deployment diagram.
(b) What are the characteristics of a well-structured deployment diagram?
(c) What are the common uses of deployment diagram?

8 (a) Draw and explain sequence diagram for the search facility of the objects, so that “Wild Card” characters can be used when searching for titles, authors, or borrowers.
(b) Explain the searching for a book operation using a java program and give its equivalent class diagram.

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2

B. Tech III Year II Semester (R09) Regular & Supplementary Examinations, April/May 2013

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 about object oriented modeling in detail.

2 (a) Define responsibility. Explain responsibility with an example.

(b) Explain about the steps for modeling of vocabulary of a system with example.

3 Explain and draw the class diagram for student course registration.

4 Define interaction? Draw the graphical representation of messages, links and sequencing of interactions in detail.

5 Prepare an activity diagram that elaborates the details of logging into an email system. Explain the steps with a neat diagram.

6 Define an event and a signal. Explain briefly about the common modeling techniques of events and signals.

7 (a) Enumerate the steps to model executables and libraries.

(b) What are the characteristics of well-structured components? Explain.

8 Draw the complete use case diagram for the library system and explain the relationships and responsibilities of various actors.

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3

B. Tech III Year II Semester (R09) Regular & Supplementary Examinations, April/May 2013

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 how the UML addresses four aims of modeling.

2 Explain about the steps for modeling the architectural views.

3 Explain and draw the object diagram for student course registration.

4 Explain and draw the sequence diagram for treatment use case between patient and doctor.

5 Draw the usecase diagram and the activity diagram for an online airline reservation system. Summarize the purpose of each usecase, actor, and its importance. Briefly explain various activity states and action states in the activity diagram.

6 Explain the forward engineering tool and reverse engineering tool for a sample code with respect to the state chart diagram.

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

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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4

B. Tech III Year II Semester (R09) Regular & Supplementary Examinations, April/May 2013

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 (a) Differentiate between collaboration diagram and state chart diagram of UML.
(b) Differentiate between sequence diagram and activity diagram in detail.

3 Explain about the steps involved in modeling simple collaborations with examples.

4 Explain in detail about the collaboration diagram with example.

5 Differentiate between forking and joining. What are the stereo types that can be applied to dependency relationships among use cases? Explain in detail the common uses and properties of activity diagram.

6 (a) What is a state? What are the several parts of states?
(b) What is a transition? Explain the several parts of transitions.

7 Explain the common modeling techniques of deployment.

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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