Total No. of Questions : 12]

P2811

[5154]-192

B.E. Information Technology
OBJECT ORIENTED MODELING AND DESIGN
(2008 Course) (Semester - I)

Time : 3 Hours]   *[Max. Marks : 100*

Instructions to the candidates:

1) *Solve Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 from Section I and*
2) *Solve Q.7 or Q.8, Q.9 or Q.10, Q.11 or Q.12 from Section II.*
3) *Answers to the two sections should be written in separate books.*
4) *Black figures to the right indicate full marks.*
5) *Neat diagrams must be drawn wherever necessary.*
6) *Assume suitable data, if necessary.*

SECTION - I

Q1) a) With suitable UML diagram explain composition and aggregation. **[8]**

b) What is an association end? What are the properties of association end?**[6]**

c) State the importance of modeling in UML **[4]**

OR

Q2) a) Explain the concept of Generalization and Inheritance with suitable example. **[8]**

b) Describe the software development life cycle of UML. **[6]**

c) How to apply constraints in Class Diagram. **[4]**

Q3) a) Describe the architectural meta model of UML. **[8]**

b) Draw a class diagram for different dimensional figure on Window Screen. **[8]**

OR

Q4) a) Write a short note on UML versions. **[8]**

b) Draw use case diagram for Student Admission System. **[8]**

Q5) a) Draw an object diagram for Hospital Management System. **[8]**

b) Write a note on 4 + 1 view architecture. **[8]**

OR

Q6) a) Write a note on Composite Structure Diagram. **[4]**

b) Draw a package diagram for "Online Shopping System" showing packages, package relationships. **[4]**

c) Explain in detail CRC method. **[8]**

SECTION - II

Q7) a) Illustrate with an example the relationship between use cases and sequence diagram. **[8]**

b) Explain with a diagram the basic UML syntax for state diagram. **[6]**

c) Compare Forward Engineering and Reverse Engineering. **[4]**

OR

Q8) a) Explain signals, partitions, exceptions and regions of Interaction overview diagram. **[8]**

b) Explain with a state diagram nested states for Telephone line. **[6]**

c) Explain the concept of 'asynchronous message' with a suitable example in the context of sequence Diagram. **[4]**

Q9) a) What do you mean by swim lane? Explain briefly the activity diagram with swim lane for servicing aero plane. **[8]**

b) Write a note on Component diagram. **[8]**

OR

Q10) a) Construct use case diagram for online air reservation system. **[8]**

b) What is the purpose of an interaction Diagram? Explain with suitable example the different types of interaction diagrams in UML 2.0. **[8]**

Q11) a) Draw the Activity diagram for issuing book from book library. **[8]**

b) Explain Sequence diagram with process transition scenario. **[8]**

OR

Q12) a) Write a note on Communication Diagram. **[4]**

b) What is a node represent in deployment diagram explain with diagram. **[4]**

c) Describe Branching and Forking in Activity diagram with suitable example. **[8]**

✗ ✗ ✗