

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 110503

Roll No.

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B. Tech

(SEM. V) (ODD SEM.) THEORY
EXAMINATION, 2014-15

OBJECT ORIENTED TECHNIQUES

Time : 3 Hours]

[Total Marks : 100

Note: Attempt All questions.

1. Answer any FOUR parts: **5x4=20**
- Define polymorphism. Is this concept only applicable to object oriented systems? Explain.
 - What is the difference between object-based and object oriented programming language?
 - What are the basic principles of Modeling? Explain in detail.
 - Why UML required? What are the basic architecture of UML?
 - "Object oriented programs are easy to maintain" Justify.
 - Explain generosity in java with suitable example.

2. Answer any FOUR parts: **5x4=20**
- Explain the Deployment Diagram. What is the difference between components and nodes?
 - Define package. Explain the package diagram with suitable diagram.
 - Write short notes on use case diagram with suitable diagram and their utility in system design.
 - What do you mean by activity diagram? Explain in detail.
 - Define State Machine? Draw a State Machine diagram for answering a telephone call.
 - What do you mean by event? What are the types of event explain with example?

3. Answer any TWO parts: **10x2=20**
- Compare the OMT methodology with SA/SD methodology. Explain with suitable example.
 - Write short notes on the following:
 - Translating object oriented design into an implementation
 - Jackson Structured Development
 - Describe the relation of functional model, object model and dynamic models. What is relationship and difference between OOA (Object oriented analysis) and OOD (Object oriented design)?

4. Answer any TWO parts: **10x2=20**

- (a) (i) What do you mean by pure object oriented language? Is Java pure object oriented language? If yes How?
- (ii) What is concept of constructor explain with example? Why it is needed?
- (b) (i) What do you mean by multithreading? Does it have an impact in the performance of Java? Explain.
- (ii) Write a program in Java to read in two matrices from the keyboard and compute their sum. Overload toString() method to display the result matrix in row and column form.
- (c) Write down the difference between the following :
 - (i) Abstract class and Interface
 - (ii) Mouse Listener and Mouse Motion Listener

5. Answer any TWO parts: **10x2=20**

- (a) Write short notes on the following with suitable examples :
 - (i) Applet and its life cycle
 - (ii) Java Swings

(b) What do you understand by JDBC/ODBC bridge? Why it is required? How it is implemented in Java? Explain with an example.

(c) Write short notes on any two of following :

- (i) Java Servlets
 - (ii) AWT
 - (iii) Exception Handling Techniques
 - (iv) Enterprise Java Beans.
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