

Roll No.

Total No. of Pages : 02

Total No. of Questions : 18

**B.Tech.(CSE) (2011 Onwards E-II) (Sem.-7,8)**  
**OBJECT ORIENTED ANALYSIS AND DESIGN**  
Subject Code : BTCS-906  
Paper ID : [A2988]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A** is **COMPULSORY** consisting of **TEN** questions carrying **TWO** marks each.
2. **SECTION-B** contains **FIVE** questions carrying **FIVE** marks each and students have to attempt any **FOUR** questions.
3. **SECTION-C** contains **THREE** questions carrying **TEN** marks each and students have to attempt any **TWO** questions.

**SECTION-A**

**Answer briefly :**

1. What is the purpose of sequence diagram?
2. What is difference between a node and a component?
3. Define Aggregation and Generalization.
4. What is fork and join condition?
5. What is the use of component?
6. What is the difference between state diagram and activity diagram?
7. Differentiate between static and dynamic behavior.
8. What is the role of interfaces?
9. Which OOAD artifact is the MOST useful in situations where asynchronous events occur?
10. What is Qualifier?

### SECTION-B

11. Explain in detail the concept of Event state diagram with help of example.
12. Explain in detail the concept of Association and its types with suitable example.
13. Explain in detail the concept of Collaboration diagram with help of example.
14. What is the purpose of deployment diagram? Give one example. How are these different from collaboration diagrams?
15.
  - a) Illustrate the relationship between sequence diagram and use case diagram.
  - b) Differentiate between layered architecture and partitioned architecture with example.

### SECTION-C

16.
  - a) What is object oriented modeling? What are its benefits?
  - b) What is the difference between structured design and object oriented design methodology?
17. What is the purpose of Use-Case Model? Discuss various relationships used in Use-case diagram with example.
18. Write short notes on :
  - a) Rational Unified Approach.
  - b) Building Blocks of UML