

## FACULTY OF INFORMATICS

B.E. 3/4 (IT) II Semester (Suppl.) Examination, January 2013

Subject: Object Oriented System Development

Time: 3 Hours

Max. Marks: 75

*Note: 1. Answer all questions from Part A. Answer any five questions from Part B.***PART – A** (25 Marks)

1. What is UML and where can UML be used? (2)
2. Discuss about “Adornments”. (2)
3. Define the concept of “dependency relationship”. (3)
4. Define events and signals. (2)
5. Explain interaction diagram. (3)
6. What are the benefits of ‘unified process’? Explain. (2)
7. Enumerate the input and output of requirement analysis. (3)
8. What is an architecture centric process? (3)
9. List the responsibilities of a component engineer in implementation model. (2)
10. Explain capturing requirements with respect to use cases. (3)

**PART – B** (50 Marks)

11. Describe the basic structural modeling with help of  
(i) Classes (ii) Relationships (iii) Common mechanisms (iv) Diagrams (10)
- 12.(a) Summarize the modeling techniques used for use case diagram and state chart diagram. (5)  
(b) Draw use case diagram for library information system of a college and state your assumptions. (5)
- 13.(a) Explain parts of transition in detail. (5)  
(b) Explain the following terms in detail showing which one is most general and most specific.  
(i) Aggregation (ii) Association (iii) Composition (5)
14. Differentiate between  
(a) Process and thread (3)  
(b) Time and space (3)  
(c) Sequential diagram and collaboration diagram (4)
- 15.(a) Discuss about the phased development process in detail. (5)  
(b) What is an artifact diagram and explain in what way deployment diagrams are useful. (5)
- 16.(a) What is software architecture and why we need it? (4)  
(b) What do you mean by iterative and incremental software development?  
Can they be used to mitigate risk? (6)
17. Write short notes on:  
(a) Core workflows (3)  
(b) Roles of implementation phase and its core workflows. (4)  
(c) Difference between system and model. (3)