

## Question Paper Code: 65054

## 5 Year M.Sc. DEGREE EXAMINATION, MAY/JUNE 2013.

Sixth Semester

Software Engineering

## XCS 473/10677 SW 604 — OBJECT ORIENTED ANALYSIS AND DESIGN

(Common to 5 Year M.Sc. Computer Technology / 5 Year M.Sc. Information Technology)

(Regulation 2003 / 2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

- 1. What is the difference between method and message?
- 2. When do you need dynamic inheritance?
- 3. What will be the content of use case description?
- 4. Define Anti patterns.
- 5. What is meant two-three rule?
- 6. How will you identify associations in a problem?
- 7. List the risks in reusability using cut and paste?
- 8. What is the significance of segregating private protocol from public protocol?
- 9. What are the difference Access specifiers available to differentiate the class attribute types?
- 10. Is dynamic modeling necessary? Justify.

## PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	(i)	What is unified Approach? Give an example and explain the need for the different stages in it. (10)	
		(ii)	List the important features of inheritance. (6)	)
			Or	
	(b)	(i)	Describe about OOS Development. What are the difference phases involved in it? (10)	
		(ii)	What is the difference between Aggregation and Association? Give examples. (6)	
12.	(a)	(i)	Compare patterns and frameworks. (6)	)
		(ii)	Explain the following in detail. (10)	)
			(1) OOSE	
			(2) OOBE.	
			Or	
	(b)	(i)	What is a layered approach? List and explain the layers in detail (8)	
		(ii)	Elaborate the differences between class diagram and process diagrams used in Rumbaugh's notation and Booch notation. (8)	
13.	(a)	(i)	How will you apply noun phrase approach in identifying the classes? Give examples. (10)	
		(ii)	How will you identify attributes and methods for a class? (6)	)
			Or.	
	(b)	(i)	With an example explain the guidelines for identifying super subclass relationships. (8)	
	4.1	(ii)	Consider an example of exam mark grading system. Apply the use case driven object oriented analysis and elaborate the different processes involved in it.  (8)	t
14.	(a)	List	and explain the corollaries of object oriented design. (16)	)
			Or	
	(b)	(i)	Is refinement of class attribute an important process? Explain it.	
		(ii)	How do design axioms help to avoid design pitfalls? (6)	
		(44)	(0)	100

15. (a) In XYZ company the sales representatives are given incentive based on the sales. There is a minimum salary fixed for each sales representative. Additionally they will be given incentive based on their sales target. Draw use case diagrams, sequence diagrams and class diagrams for automatically calculating the paybill for each sales representative. (16)

Or

(b) In a public sector bank, it is required to differentiate the savings account holder from current account holder. A current account holder is considered as a special customer who can avail overdue with the bank. Draw necessary UML diagrams to solve this problem. (16)

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