

Reg. No.:			

Question Paper Code: 65082

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

Sixth Semester

Software Engineering

XSE 361/10677 SW 601 — SOFTWARE DESIGN

(Regulation 2003/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

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

- 1. What is meant by design? Give its importance and its elements.
- 2. Define Software Process.
- 3. Write a note on decomposition.
- 4. List the importance of design documentation.
- 5. What is Backtracking?
- 6. Define State Vector in JSD.
- 7. Mention any four tools that are used for designing the software.
- 8. Define task analysis.
- 9. Mention the metrics that are used to measure object oriented system.
- 10. List the features of building a quality class.

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

11. (a) Explain the roles of Designer in capturing, explaining and checking design with a Suitable example. (16)

Or

- (b) Explain the use of text, diagrams and mathematical form in representing the view point of
 - (i) The hierarchy of pages in the website.

(8)

(ii) The procedure that make use of a particular data type in a program. (8)

- 12. (a) A Car Company which sell both the used cars and new cars of various model, design the system by using Top_Down approach of the Object oriented design. Consider the following requirements for designing.
 - (i) Customers are allowed to perform test drive before purchasing the car.
 - (ii) The company also sell car parts and do servicing
 - (iii) The customer either purchases the parts available in the part department directly or the service department can replace the parts of the car during servicing the car. (16)

Or

- (b) (i) Explain the function oriented design in detail. (10)
 - (ii) Describe Coupling and Cohesion. (6)
- 13. (a) What is structural analysis? Explain with an example. Also describe the limitations in it and how to overcome that. (16)

Or

- (b) Draw the Context diagram for ATM, elaborate it into three levels of DFD and derive Structure chart using SSADM. (16)
- 14. (a) What do you mean by user interface design? How its framework is useful in the software design? Explain with an example. (16)

Or

- (b) Explain the various phases of evaluating the interface design with an example. (16)
- 15. (a) Explain the various activities involved in managing and planning of an object oriented project. (16)

Or

2

(b) What is a Pattern? In what way it is used for modeling? Explain the modeling techniques that are used to model the Design Pattern of an application. (16)