

**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE**

**FIFTH SEMESTER – November 2009**

**CS 5505/CS 5502 - SOFTWARE ENGINEERING**

Date & Time: 5/11/2009 / 9:00 - 12:00

Dept. No.

Max. : 100 Marks

**PART – A**

**Answer ALL questions**

**(10 x 2=20 marks)**

1. Define Software Engineering.
2. What are the characteristics of software?
3. What is the difference between the “Known Risks” and Predictable Risks” ?
4. What are the Objectives of Requirement Analysis?
5. Define System Flow Diagram[SFD]
6. List out the factors of data modeling.
7. What is Coupling?
8. What Types of Design Patterns are available for the software Engineer?
9. What are the Attributes of Good Test?
10. Define SQA Plan.

**PART – B**

**Answer ALL questions**

**(5 x 8 = 40 marks)**

11. (a) Explain about Linear Sequential Model.  
**(OR)**  
(b) Discuss the cost estimation procedure using COCOMO Model.
12. (a) Explain the process of ‘ Risk Analysis and Management.’  
**(OR)**  
(b) Explain about the Software requirement specification in detail.
13. (a) Explain about Data Flow Oriented design in detail.  
**(OR)**  
(b) Discuss the elements of the analysis model with diagram.
14. (a) Explain the various software design concepts  
**(OR)**  
(b) Discuss about the effective modular design.
15. (a) Discuss about the Debugging Process.  
**(OR)**  
(b) Explain about the McCall’s quality factors of Software.

**PART – C**

**Answer any TWO questions**

**(2 x 20 = 40 marks)**

16. (a) Discuss about the spiral and win model. (13)  
(b) Explain about the software prototyping. (7)
17. (a) Explain Jackson system development with an example.  
(b) Discuss about the evolution of software design in detail.
18. (a) Explain about the testing fundamentals in detail.  
(b) Discuss about the black box testing in detail.

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