LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIFTH SEMESTER – **NOVEMBER 2016**

CS 5505/CS 5502 – SOFTWARE ENGINEERING

Date: 03-11-2016   Dept. No.   Max. : 100 Marks
Time: 09:00-12:00

PART - A
Answer ALL Questions: **(10 x 2 = 20 marks)**

1. Define Software Engineering.

2. What is PM-CMM?

3. List the five areas of software requirements analysis.

4. What are the issues to be considered while designing an effective risk strategy?

5. What is the purpose of a Data Flow Diagram?

6. Define Modality.

7. What is effective modular design?

8. What is an Architectural design?

9. Define Software Testability.

10. List McCall's Quality Factors.

PART - B
Answer ALL Questions: **(5 x 8 = 40 marks)**

11. a) Discuss about the Prototyping Model.
                    (or)
    b) Discuss about Function Oriented Metrics.

12. a) Discuss about Software Requirements Specification.
                    (or)
    b) Discuss about software risk drivers and their impact on the risk component.

13. a) Explain the Jackson System Development classic analysis method for requirements specification.
                    (or)
    b) Discuss about Data Modeling.

14. a) List any 5 basic Design Principles.
                    (or)
    b) Write notes on (i) Abstraction   (ii) Refinement.

15. a) Explain black-box testing technique.
                    (or)
    b) Explain the Cyclomatic Complexity

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PART - C

Answer Any TWO Questions   **(2 x 20 = 40 marks)**

16. a) Explain the COCOMO model for software cost estimation.

    b) Discuss about the five tasks of Software Configuration Management.

17. a) Discuss about the elements of the analysis model.

    b) Explain how Coupling and Cohesion are used for measuring Functional Independence.

18. a) Discuss about Debugging.

    b) Discuss about the activities associated with software project planning.

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