LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FIFTH SEMESTER – APRIL 2013

CS 5505/CS 5502 - SOFTWARE ENGINEERING

Date: 10/05/2013   Dept. No.   Max. : 100 Marks
Time: 9:00 - 12:00

PART-A

Answer ALL the questions: 10 X 2= 20

1. Define Software Engineering.
2. What is Problem definition?
3. What are the major factors that influence software cost?
4. What is Software Requirements specification?
5. Define Modularity.
6. What is Single Entry Single Exit Constructs?
7. What is concurrency mechanisms?
8. What is software quality assurance?
9. What is meant by configuration management?
10. What is testing?

PART-B

Answer ALL the questions   5 X 8= 40

11. a) What is type checking? What are its levels?
                (OR)
    b) Explain the phased life-cycle model of the software life cycle.
12. a) Explain the objectives of software requirements?
                 (OR)
    b) Explain the cost model of software life cycle?
13. a) Write a note on PSL/PSA?
                (OR)
    b) What are the classical analysis methods? Explain the following:
         i) JSD   ii) SADT
14. a) Explain about McCall's quality factor
                 (OR)
     b) Explain the evolution of software design and its principles.
15. a) Explain about software maintenance.
                (OR)
    b) Explain about milestones walkthroughs and inspections in software design.

PART-C

Answer Any TWO questions   2X20=40
16. a) Explain formal verification methods in detail.   (10Marks)
    b) Describe in detail unit testing and debugging   (10Marks)

17 a) Describe briefly about the structured coding techniques.   (10Marks)
   b) Explain about the following in design Principles.   (10Marks)
            i) Abstraction
            ii) Modularity

18 a) Discuss about Verification and Validation Techniques   (10Marks)
    b) Discuss on the following:-
     i) Organizational structure;   ii) managerial issues   (10Marks)

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