

4555/SCS8C53/
SCS9C53

NOVEMBER 2013

SOFTWARE ENGINEERING

(For those who joined in July 2008 and after)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ means the ability of a program to perform a required function under stated conditions for a stated period of time.
(a) Efficiency (b) Robustness
(c) Accuracy (d) Reliability
2. A _____ is a mock_up or model of a software product.
(a) Module (b) Prototype
(c) Function (d) Destructor
3. _____ programs interact directly with the hardware.
(a) System (b) Utility
(c) Application (d) Java

4. The COCOMO is an algorithmic cost model described by _____.
(a) Richard Fairley (b) Boehm
(c) Rayleigh (d) Putnam
5. _____ expressions can be used to specify the syntactic structure of symbol strings.
(a) Conditional (b) Logical
(c) Arithmetic (d) Regular
6. _____ is a useful tool for documenting and communicating software requirements.
(a) PSL/PSA (b) SADT
(c) SSA (d) Gist
7. _____ systems have independent processes that can be activated simultaneously if multiple processors are available.
(a) Concurrent (b) Pipelined
(c) Newborn (d) Modular
8. _____ design was developed by Constantine as a top-down technique for architectural design of software systems.
(a) Unstructured
(b) Structured
(c) Levels of Abstraction
(d) Stepwise Refinement

9. The goal of a _____ is to discover and make note of problem areas.

- (a) Static Analysis (b) Data Flow Diagram
(c) Decision Table (d) Walkthrough

10. _____management is concerned with tracking and controlling of the work products that constitute a software product.

- (a) Configuration (b) Memory
(c) File (d) Processor

SECTION B — ($5 \times 7 = 35$ marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write short notes on: Some Size Factors in Software Engineering.

Or

(b) Discuss briefly on: Developing a Solution Strategy.

12. (a) Discuss any FOUR Software Cost Factors.

Or

(b) Discuss about how to estimate Software Maintenance Costs.

13. (a) Write about the Software Requirements Specification.

Or

(b) Discuss briefly on: Gist.

14. (a) Discuss about Modules and Modularization Criteria.

Or

- (b) Write Short Notes on: Test Plans.

15. (a) Discuss about Quality Assurance.

Or

- (b) Discuss in detail, Other Maintenance Tools and Techniques.

SECTION C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Describe in detail, Planning an Organizational Structure.
17. Explain any ONE Software Cost Estimation Technique.
18. Discuss in detail, Formal Specification Techniques.
19. Explain about Design Notations in Software Design.
20. Describe the Managerial Aspects of Software Maintenance.