

16529(D)

MCA 1st Semester Examination

Software Engineering (CBS)

MCA-104 - 0 DEC 2016

Time : 3 Hours

Max. Marks : 60

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt five questions in all. Question no. 9 in Section E is compulsory. Rest attempt one each from the Section A, B, C and D.

SECTION - A

1. (a) What is the main criterion for deciding whether or not to use the waterfall model in software development project? (4)
- (b) How software requirements are collected from customers and prepared in the form of documentation? Explain with an illustration. (8)
2. (a) Why is SRS also known as the black box specification of system? (4)
- (b) What are the different activities in a spiral model? Explain with a diagram. (8)

SECTION - B

3. (a) Explain the development phases of the detailed COCOMO model. (6)
- (b) What are the objectives of software design? How do we transform an informal design to a detailed design? (6)
4. (a) Explain risk assessment and migration. (5)

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- (b) Software project planning entails what activities? What are the difficulties faced in measuring the Software Costs? (7)

SECTION - C

5. Explain various Object Oriented concepts used in Software Engineering. Give an example. (12)
6. Explain following terms:
 - (a) Design principles of function oriented design. (6)
 - (b) Function and object oriented design. (6)

SECTION - D

7. (a) Differentiate between reverse engineering and re-engineering. (6)
- (b) Configuration management and maintenance. (6)
8. Explain following terms:
 - (a) Use case oriented matrices.
 - (b) Web engineering project matrices.
 - (c) Project matrices. (3×4=12)

SECTION - E

9. Explain following terms:
 - (i) Maintenance process.
 - (ii) Certification types.
 - (iii) Token count.
 - (iv) Critical design review.
 - (v) Activities of spiral model.
 - (vi) Requirement engineering.
 - (vii) Feasibility study.
 - (viii) Size estimation. (8×1½=12)