

**MCA-302**

**MCA. III Semester**

Examination, December 2016

**Software Engineering Methodology**

*Time : Three Hours*

*Maximum Marks : 70*

- Note: i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.  
 ii) All parts of each question are to be attempted at one place.  
 iii) All questions carry equal marks, out of which part A and B (Max.50 words) carry 2 marks, part C (Max.100 words) carry 3 marks, part D (Max.400 words) carry 7 marks.  
 iv) Except numericals, Derivation, Design and Drawing etc.

**Unit - I**

1. a) What are the characteristic of good software?
- b) What is the role of system analyst?
- c) Give various methods of process design.
- d) Explain the Software Life Cycle Model in detail.

OR

What are the objectives of the feasibility study phase of software development? Explain the important activities that are carried out during the feasibility study phase of a software development project. Mention suitable phase entry and exit criteria for this phase.

**Unit - II**

2. a) What are the software myths?
- b) What do you mean by layered design?
- c) What is function point? Explain its importance.
- d) Software project planning entails what activities? What are the difficulties faced in measuring the Software Costs?

OR

Describe waterfall, incremental, iterative water fall and spiral model.

**Unit - III**

3. a) What is project planning?
- b) What is the purpose of risk analysis?
- c) Define cohesion and coupling. Give suitable examples.
- d) Explain the contents of a software project management plan.

OR

Describe the design process in software development. What are the characteristics and criteria for design?

**Unit - IV**

4. a) What do you understand by software review?
- b) What is validation testing?
- c) How do we define Software Quality?
- d) Describe the activities or tasks and responsibilities for developer or tester in support of multilevel testing.

OR

Compare system, integration and unit testing.

**Unit - V**

5. a) What do you mean by case tools?
- b) Define object oriented software engineering.
- c) What is the role of MIS in software Design?
- d) Explain SIMON model of decision making with appropriate diagram.

OR

Give importance of MIS in Inventory, i.e. its different functions under opening stock and other utility.

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