Roll No .....

MCA - 302

M.C.A. III Semester

Examination, June 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) Explain system development life cycle.
   b) How the information is gathered for system planning?
   c) Explain various stages of system design. How proper design helps implementation stage?
   d) Justify the statement that system development is a process of progressive change.

OR

What do you mean by structured analysis? Explain in detail the tool used for analysis of any software system.

Unit - II

2. a) Write difference between process and product.
   b) Write the advantages of software process model.
   c) Define the term metrics, measures and indicators.
   d) Explain RAD model. Write different drawbacks of RAD model.

OR

Write different types of software myths.

Unit - III

3. a) What is the objective of project planning?
   b) Explain the term Risk analysis.
   c) What are the benefits of modular design?
   d) What do you mean by coupling? Explain various types of coupling.

OR

Write design principles and explain how architecture can be represented.

Unit - IV

4. a) What are the factors measured by software quality?
   b) Explain the term formal technical reviews.
   c) List five guidelines for effective testing.
   d) Write important constituents of software quality assurance plane, explain in detail.

OR

List few techniques used for verification testing. Explain briefly.

Unit - V

5. a) What is the role of computer in MIS?
   b) Define decision support system.
   c) Define the term software re-engineering.
   d) Draw a general architecture of a CASE environment. Explain its important characteristics.

OR

Using examples compare and contrast expert system and DSS.

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