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Total No. of Pages : 02

Total No. of Questions : 09

MCA (2015 & Onwards) (Sem.-3)
SOFTWARE ENGINEERING AND PROJECT MANAGEMENT
Subject Code : MCA-303
Paper ID : [74075]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTIONS-A, B, C & D contains TWO questions each carrying TEN marks each and students has to attempt any ONE question from each SECTION.
2. SECTION-E is COMPULSORY consisting of TEN questions carrying TWENTY marks in all.

SECTION-A

Q1 What is software development? How it is different from software engineering? Explain various principles of software engineering in detail.

Q2 Explain the following :

- a) Prototyping model
- b) Waterfall model

SECTION-B

Q3 What are the various software design principles? Explain the various differences between procedural and object oriented design.

Q4 Explain the following :

- a) Need of SRS and its components
- b) Role of architectural design

SECTION-C

Q5 a) What is need of software project planning? Discuss its characteristics.

b) What are the different types of metrics? Explain their role in software project planning.

Q6 Compare and contrast the following :

- a) Verification and validation
- b) White and black box testing

SECTION-D

- Q7 What is reverse engineering? Discuss its need. Explain how reverse engineering is different from re-engineering.
- Q8 Explain the following :
- a) CASE Tools
 - b) Version and change control

SECTION-E

Q9 Answer briefly :

- a) What is significance of spiral model?
- b) Define system analysis.
- c) What is role of feasibility study in software engineering?
- d) What is need of data design?
- e) What is management spectrum?
- f) How error is different from fault?
- g) Define integration testing.
- h) What is need of acceptance testing?
- i) List various principles of web engineering.
- j) What are merits and demerits of PERT?