

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

MCA (2012 & Onward) (Sem.-3)
SOFTWARE ENGINEERING

Subject Code : MCA-303

Paper ID : [B1159]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

- 1. SECTIONS-A, B, C & D contains TWO questions each carrying TWENTY marks each and students has to attempt any ONE question from each SECTION.**
- 2. SECTION-E is COMPULSORY consisting of FIVE questions carrying TWENTY marks in all.**
- 3. Use of non-programmable scientific calculator is allowed.**

SECTION-A

1.
 - a) What do you mean by Software Engineering? Explain evolution of Software engineering.
 - b) Explain agile methodology using SCROM.
2.
 - a) What is feasibility study? Explain its types, contents and purpose.
 - b) What do you mean by software process? How to select appropriate process model?

SECTION-B

3.
 - a) Explain user interface design process.
 - b) Give a SRS for developing a software for payroll management system.
4.
 - a) Discuss various design principles.
 - b) Explain software configuration management and change control management in detail.

SECTION-C

5.
 - a) Enlist and explain steps required to perform cost estimation using COCOMO model.
 - b) Explain how Gantt chart can be used for planning and controlling small projects with examples.
6.
 - a) What are the different techniques in white-box testing?
 - b) Discuss various architectural styles.

SECTION-D

7.
 - a) What do you understand by Quality Assurance? Explain levels of quality assurance.
 - b) Explain security engineering and re-Engineering.
8.
 - a) What do you mean by quality standards and also explain quality standard ISO 9126?
 - b) Explain different CASE tools.

SECTION-E

9. Write briefly :

- a) What is meant by Software Engineering?
- b) What are the characteristics of software?
- c) What are the phases of Problem solving Loop?
- d) List out the activities of Linear Sequential Model.
- e) Mention some of the drawbacks of RAD model.
- f) What are the types of changes encountered during the Support phase?
- g) State the System Engineering Hierarchy?
- h) Mention some of the factors to be considered during System Modeling.
- i) Define Verification & Validation.
- j) Write down the functional requirement for an Library management system.