Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 09

M.Sc. (Computer Science) (2016 & Onwards) (Sem.–3)

SOFTWARE ENGINEERING

Subject Code : MSC-305

M.Code : 72107

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

1. Explain all the phases of waterfall model.
2. Explain the following concepts :
   a) Analysis Principles of Software Engineering
   b) Evolution of Software Engineering.

SECTION-B

3. How ER diagrams are significant for Software Engineering? Explain.
4. Discuss the following in detail :
   a) Procedural Software Design
   b) Principles for Software design

SECTION-C

5. Describe the following by taking suitable examples:
   a) Function Points and Lines of Codes
   b) COCOMO-I model
6. Differentiate the following :
   a) White Box and Black Box Testing
   b) Verification and Validation

SECTION-D

7. What is meant by Software Quality? Explain any standards for ensuring software quality.

8. Explain the following :

   a) Change Control

   b) Models for Software Quality Management

SECTION-E

9. Write briefly :

   a) Define Software Process.

   b) Name any two principles of Software Engineering.

   c) Comment on SRS document.

   d) What is DFD?

   e) Which phase of Software development model generates Data Dictionaries?

   f) Discuss cost estimation briefly.

   g) How test case differs from test suit?

   h) Which model talks about risk assessment?

   i) Enlist any two software quality metrics.

   j) Differentiate re-engineering and reverse-engineering.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.