

**A-1299**

Total Pages : 3

Roll No. ....

**MCS-503**

**SOFTWARE ENGINEERING**

Examination February, 2026

Time : 2:00 Hrs.

Max. Marks : 70

**Note :-** This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

**Section-A**

**Long Answer Type Questions** (2×19=38)

**Note :-** Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

**A-1299**

( 1 )

P.T.O.

1. Give an overview of current software design approaches. What is the difference between Procedural Design and Interface Design ?
2. What do you understand by software testing ? Why is testing important ? Discuss various software testing.
3. List the differences between spiral model and waterfall model. Which one of them will you prefer to develop a Banking System and why ?
4. What is capability maturity model [CMM] ? Discuss the various key process areas of capability maturity model [CMM] at various maturity levels.
5. What is object oriented software development ? List the differences between an object used in object oriented analysis and an object used during data modelling.

### **Section–B**

#### **Short Answer Type Questions (4×8=32)**

**Note** :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. What is Data Flow Diagram ? Explain with the help of example.
2. What is the need of software Project planning ? Explain the objectives of software Project planning.
3. What is UML ? How will you perform Object Modelling using UML ?
4. Explain the role of metrics in the software development and define prototype model.
5. What is user interface design ? Explain the basic concepts in user interface design.
6. What are the characteristics of software design ? Discuss various phases of design process.
7. Explain the fundamental Function-oriented software design concepts.
8. What do you understand by software reuse ? What are the software reuse approaches ?

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