A–1106

MCA–17

MCA

(Software Engineering)

5th Semester Examination, 2024 (June)

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.

1. What do you mean by software Engineering ? What are the software components ? Explain.

2. Explain Waterfall model with diagram along with advantages and disadvantages.

3. What is coupling and cohesion ? What are the different types of coupling and cohesion ? Explain.

4. What is Data Flow Diagram ? Draw the DFD for a Student Information System.

5. What do you mean by Software Maintenance ? Write the characteristics of Software Maintenance.

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. Define the characteristics of good software.

2. What is Software testing and what are its objectives ?

3. What is SRS document ? What are the characteristics of a good SRS document ? Explain,

4. Explain feasibility study and its different types.

5. What is the importance of Software Quality Assurance ? Explain.

6. Discuss software testing strategies. Differentiate between Verification and Validation.

7. Explain the following terms :

   (i) Unit testing and integration testing

   (ii) White-box testing and Black-box testing.

8. Explain COCOMO model.

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