



C20-CM-503/CAI-502

**7637**

**BOARD DIPLOMA EXAMINATION, (C-20)**

**OCTOBER/NOVEMBER—2023**

**DCME – FIFTH SEMESTER EXAMINATION**

SOFTWARE ENGINEERING

Time : 3 Hours ]

[ Total Marks : 80

**PART—A**

3×10=30

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **three** marks.  
(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Write about early computer programming.
2. Who is a good software engineer?
3. Write the names of three main categories of risks which can affect software project.
4. What is a decision tree?
5. What, according to you, is a good software design?
6. What is the use of case diagram?
7. What is an user interface design?
8. Define software reliability.
9. What are the verifications and validations with respect to software engineering?
10. Write short note on coding standards.

- Instructions :** (1) Answer **all** questions.  
(2) Each question carries **eight** marks.  
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

**11.** (a) Discuss iterative waterfall model with appropriate diagram.

**(OR)**

(b) Explain spiral model with the help of a neat diagram.

**12.** (a) Explain the function point metric used for project size estimation.

**(OR)**

(b) Explain PERT chart with a neat sketch.

**13.** (a) Explain about the organisation of SRS document.

**(OR)**

(b) What do you understand by traceability of requirements?

**14.** (a) Why functional independence is the key factor for a good software design?

**(OR)**

(b) Explain software design approaches.

**15.** (a) Explain about SEI capability maturity model.

**(OR)**

(b) Explain white box testing.

**PART—C**

10×1=10

- Instructions :** (1) Answer the following question.  
(2) The question carries **ten** marks.  
(3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 16.** Suggest the most appropriate software process model that might be used for developing a system to control anti-lock braking in a car.

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