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

 $3 \times 10 = 30$

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.

1 [Contd...

PART—B 8×5=40

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.

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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.

