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BOARD DIPLOMA EXAMINATION, (C-20)

MAY/JUNE—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. Define the term high level language programming. Give two examples.   1+1+1

2. Write the job responsibilities of a software project manager.   1+1+1

3. State the three metrics for project size estimation.   1+1+1

4. List any three characteristics of a good SRS document.   1+1+1

5. Define cohesion and coupling.   1½+1½

6. List the three characteristics of a good user interface.   1+1+1

7. State the role of UML in object oriented design.   3

8. Differentiate the terms verification and validation.   1+1+1

9. Write about three designs of test cases.   1+1+1

10. State the three debugging guidelines.   1+1+1

PART—B

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)* Compare any two software life cycle models. 4+4

(OR)

(b) Explain spiral model in detail. 8

12. *(a)* Explain different works of staffing level estimations. 8

(OR)

(b) Explain risk management in detail. 8

13. *(a)* Explain software requirement specifications (SRS) in detail. 8

(OR)

(b) Explain about organization of the SRS document. 8

14. *(a)* Explain the different approaches of software design. 8

(OR)

(b) Explain the steps to draw the use-case diagram. 8

15. *(a)* Explain about black box testing and white box testing. 4+4

(OR)

(b) Explain software quality management system in detail. 8

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. Design SRS document by assuming that you had a task for implementing ATM operations. The operations to be included are listed below :

(a) Language selection

(b) Account maintenance

(i) Account type

(ii) Withdrawal/deposit

(iii) Amount

(iv) Denominations

(v) Money deposition

(vi) Balance transfer

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