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BOARD DIPLOMA EXAMINATION, (C–09)

OCT/NOV—2014

DCME—SIXTH 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 *four* simple sentences.

1. What is the basic difference between a control-flow-oriented and a dataflow-oriented design techniques?

2. List the problems that arise if software configuration management is not used.

3. What are the skills necessary for software project management?

4. What are the three main strategies used for risk containment?

5. Identify various functional requirement problems.

6. What is traceability of requirement?

7. What is the advantage of functional independence?

8. What are the characteristics of good user interface?

9. List the types of errors checked during code walkthrough.

10. Compare ISO 9000 certification and SEI/CMM.

PART—B

10×5=50

Instructions : (1) Answer *any* **five** questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain Spiral model of software development with a neat diagram. 10

12. *(a)* List the project activities chronologically, a software project manager needs to do for scheduling. 5

(b) Explain the critical path method. 5

13. *(a)* What are the attributes that a good software engineer should possess? 5

(b) Explain the empirical estimation techniques. 5

14. *(a)* Discuss the contents of SRS document. 5

(b) How would you identify functional requirements? 5

15. Explain the following software design approaches :

(a) Function-oriented design 5

(b) Object-oriented design 5

16. *(a)* What are the guidelines for effective debugging? 6

(b) Differentiate between phased and incremental integration testing. 4

17. Explain different types of performance testings. 10

18. Explain the six reliability metrics which can be used to quantify the reliability of software products. 10

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