

2020/EVEN/SEM/BVOC-GE-403/275

TDC Even Semester Exam., 2020

B.VOC. (Information Technology)

(4th Semester)

Course No. : BVOC-GE-403

(Software Engineering)

Full Marks : 70

Pass Marks : 28

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

Answer any five questions

UNIT—I

1. (a) What are the characteristics of software? 4
- (b) What are the applications of software? 4
- (c) What are the concepts of project management? Explain its importance. 6
2. (a) Compare and contrast between the waterfall model and prototyping model. Which one do you think is better and why? Explain. 7+3=10
- (b) What are software myths? Explain. 4

(2)

UNIT—II

3. (a) What do you mean by structured analysis? Explain in detail. 8
- (b) Explain the concepts of cohesion and coupling. 6
4. (a) Draw and explain with an example the concept of structural chart and pseudocode used in function-oriented design. 8
- (b) Draw an ER diagram for a college management system. 6

UNIT—III

5. (a) Write the importance of UML in developing object-oriented software. 6
- (b) How does object-oriented design differ from function-oriented design? Explain with an example. 8
6. (a) What is a class diagram in unified modeling language? 2
- (b) Explain the differences between sequence diagram and collaboration diagram. 6

(3)

- (c) Explain the importance of consistency checkers. What will happen if avoided keeping only design walk-through and critical design review in verification process? 6

UNIT—IV

7. (a) What are integration testing and validation testing? 6
- (b) What is system testing? Explain. 8
8. (a) Explain software testing fundamentals in detail. 8
- (b) Differentiate between black-box testing and white-box testing. 6

UNIT—V

9. (a) What do you mean by quality assurance? What are the goals of SQA? 2+6=8
- (b) What are the software reliability metrics? 6
10. (a) Discuss in detail Software Configuration Management. 10
- (b) What is CMM? 2
- (c) What is a baseline in software development? 2

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