

**2022/TDC(CBCS)/EVEN/SEM/
BVOCGEC-403T/372**

TDC (CBCS) Even Semester Exam., 2022

BVoc (INFORMATION TECHNOLOGY)

(4th Semester)

Course No. : BVOCGEC-403T

(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

1. (a) Describe waterfall model. Write the advantages and disadvantages of waterfall model. 8
- (b) Explain spiral model. 6
2. (a) What is SRS? Write about the characteristics and components of an SRS. 9
- (b) Describe COCOMO model. 5

(2)

3. (a) Write a short note on data flow diagram. 5
 (b) Draw an ER diagram of college management system. 9

4. Write short notes on the following :
 $3+3+3+3+2=14$

- (a) Top-down design
 (b) Bottom-up design
 (c) Modularity
 (d) Decision tree
 (e) Coupling

5. (a) Compare object-oriented decomposition with algorithmic decomposition. 4
 (b) What is object-oriented design? Discuss about the UML building blocks. 10

6. Write short notes on the following :
 $3+3+4+4=14$

- (a) Class diagram
 (b) Sequence diagram
 (c) Collaboration diagram
 (d) Activity diagram

(3)

7. What do you mean by white box testing? What are the advantages and disadvantages of white box testing? Differentiate white box testing from black box testing. $4+5+5=14$

8. Write short notes on the following : $5+5+4=14$

- (a) Integration testing
 (b) Validation testing
 (c) System testing

9. What is software quality assurance? Discuss the software quality assurance activities. What do you mean by software reliability?
 $2+10+2=14$

10. What do you mean by software configuration management (SCM)? What is the importance of SCM? Discuss about the tasks performed in SCM process. $2+2+10=14$

★ ★ ★