Reg. No. ☐☐☐☐☐☐☐

V Semester B.C.A. Degree Examination, March/April - 2022
COMPUTER SCIENCE
Software Engineering
(CBCS Scheme)
Paper : BCA 502T

Time : 3 Hours   Maximum Marks : 100

Instructions to Candidates:
    Answer all sections.

SECTION - A

I.   Answer any **Ten** of the following.   (10×2=20)

1.   Define software engineering.

2.   Name two types of software products.

3.   What is feasibility study?

4.   Mention two advantages of prototype model.

5.   What is coupling? Name two types of coupling.

6.   Define object and class.

7.   What are OOD and OOP?

8.   Difference between fault and failure.

9.   Define SRS.

10. Differentiate between verification and validation.

11. Define reliability. Mention its types.

12. What is a test case?

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SECTION - B

II. Answer any **Five** of the following. (5×5=25)

13. Explain waterfall model with its advantages and disadvantages.

14. Describe system procurement process.

15. Explain different phases of system design process with a neat diagram.

16. Explain Evolutionary and throw - away proto typing.

17. Differentiate between black box and white box testing.

18. Write a note on reliability growth modeling.

19. Describe different requirement validation checks.

20. Write a note on software quality assurance.

SECTION - C

III. Answer any **Three** of the following. (3×15=45)

21. a) Explain the spiral model with neat diagram. (8)

    b) Explain IEEE structure of SRS document. (7)

22. Describe requirement engineering process. (15)

23. a) Explain different reliability metrics.

    b) Explain different styles of user system interaction. (8+7)

24. a) State the different types of cohesion with example.

    b) Explain different levels of testing. (8+7)

25. a) Describe clean room software development process.

    b) Write a note on different types of software maintenance. (8+7)

SECTION - D

IV. Answer any **one** of the following. (1×10=10)

26. Explain COCOMO model in detail.

27. Draw a neat 1st level DFD for Banking system. Label all the flow lines and briefly explain.