15522

Reg. No. | | | | | | | | |

V Semester B.C.A. (CBCS) Degree Examination, March - 2021
COMPUTER SCIENCE
Software Engineering

Time : 3 Hours **Maximum Marks : 100**

Instructions to Candidates:

Answer all sections.

SECTION - A

I. Answer any **Ten** questions. **(10×2=20)**

1. Define System engineering.
2. What is customised software product?
3. What is system decommissioning?
4. Write briefly about object Oriented Design.
5. What are the characteristics of GUI?
6. Define Coupling.
7. Differentiate between verification and validation.
8. What is RGM?
9. What is Stress testing?
10. What is SRS? Mention its purpose.
11. What is risk mitigation?
12. Define quality assurance.

SECTION - B

II. Answe any **Five** questions. **(5×5=25)**

13. Describe system procurement process.
14. Explain waterfall model with a neat diagram.
15. Write a note on User Interface Design.
16. Explain the quality characteristics of design.
17. Describe the cleanroom software development process with its advantages.
18. Write a note on system reliability engineering.
19. Write a note on Quality Management.
20. Bring out the importance of quality control.

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SECTION - C

III. Answer any **Three** questions. Each question carries **Fifteen** marks. **(3×15=45)**

21. a) Explain different phases of SDLC.
    b) Explain IEEE structure of SRS document.

22. Explain Spiral model with a neat diagram. Discuss its advantages and disadvantages.

23. a) Explain various types of coupling.
    b) Draw a 3-level data flow diagram for backing system and explain.

24. a) Software reuse is very supportive for engineers. Justify your answer.
    b) What is reliability metrics? Explain the types of software reliability metrics.

25. a) Explain the various types of testing.
    b) Explain COCOMO model in detail.

SECTION - D

IV. Answer any **One** question. **(1×10=10)**

26. Explain system engineering process with a neat diagram.

27. Write short notes on the following.
    a) Risk Management.
    b) Feasibility Study.