18U566 (Pages: 2) Name: ……..

Reg. No…...…….

FIFTH SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2020

(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

CC17U BCA5 B10 - PRINCIPLES OF SOFTWARE ENGINEERING

(Computer Application - Core Course)

(2017 Admission onwards)

Time: Three Hours Maximum: 80 Marks

PART A

Answer ***all*** questions. Each question carries 1 mark.

1. Define a process.
2. What is DFD, what are components?
3. Name the phases of SDLC
4. Write the steps to build a requirement model
5. What is a state chart diagram?
6. List the umbrella activities.
7. Explain forward engineering.
8. What are major concerns for quality management.
9. Define test cases.
10. Explain functional independence in design process.

(10 × 1 = 10 Marks)

PART B

Answer ***all*** questions. Each question carries 2 marks.

11. What is Software Engineering?
12. Define Coupling and Cohesion.
13. What is the difference between top-down and bottom-up integration testing approaches?
14. What are the characteristics of good software design?
15. Explain the debugging process.
16. Describe the reliability of a software product.
17. What are formal system specifications?
18. Write note on COCOMO model.

(8 × 2 = 16 Marks)

PART C (Short Essay Questions)

Answer any ***six*** questions. Each question carries 4 marks.

19. What is White-box testing?
20. Write note on scheduling.
21. Briefly explain phases of SDLC.
22. Identify the stages through which a reuse domain progresses?
23. Explain SRS Document format.
24. What is the difference between process metrics and product metrics?
25. Write note on object oriented design concepts.
26. What is software reengineering? Draw process model.
27. What are ISO 9000 certification and discuss the relative merits.

(6 x 4 = 24 Marks)

PART D (Essay Questions)

Answer any ***three*** questions. Each question carries 10 marks.

28. Explain different software process models.
29. Describe the flow oriented requirement modeling strategies.
30. Explain any five UML modeling diagram.
31. Describe the testing strategies for a conventional software.
32. What are structured coding styles and coding techniques? Explain.

(3 × 10 = 30 Marks)

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