17U566	(Pages: 2)	Name:
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FIFTH SEMESTER B.C.A. DEGREE EXAMINATION, NOVEMBER 2019 (CUCBCSS-UG)

CC17U BCA5 B10 - PRINCIPLES OF SOFTWARE ENGINEERING

(Core Course)

(2017 Admission Regular)

Time: Three Hours Maximum: 80 Marks

PART A

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

- 1. What are the five generic process frame work activities?
- 2. What are the characteristics of software?
- 3. Give two merits of incremental model.
- 4. Define the term debugging.
- 5. Which are the task regions of spiral model?
- 6. What is requirement engineering?
- 7. What is DFD?

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- 8. Define software testing.
- 9. What is reverse engineering?
- 10. What is acceptance testing?

 $(10 \times 1 = 10 \text{ Marks})$

PART B

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

- 11. What are the characteristics of SRS?
- 12. What is meant by internal documentation?
- 13. What are functional and non functional requirements?
- 14. Explain the symbols of DFD.
- 15. Explain various structural diagrams.
- 16. List umbrella activities.
- 17. What is the difference between system testing and integration testing?
- 18. What is the difference between verification and validation?

 $(8 \times 2 = 16 \text{ Marks})$

PART C

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

- 19. Explain various testing strategies.
- 20. What is coupling? Which are the different types of Coupling?
- 21. What is meant by abstraction? What is its role in software design?
- 22. What are the levels of testing? Discuss different types of testing with suitable examples.
- 23. Explain McCall's quality factors.
- 24. Describe various requirement elicitation techniques used in requirement engineering.
- 25. What is the difference between system analysis and system design?
- 26. Explain coding guidelines.
- 27. What is meant by Software maintenance? Explain different types of software maintenance.

 $(6 \times 4 = 24 \text{ Marks})$

PART D

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

- 28. Describe various object oriented design concepts.
- 29. What is meant by requirements engineering? What are the functions used in requirements engineering process?
- 30. Explain waterfall model of software development. Enumerate its merits and demerits.
- 31. Explain various architectural styles used in software design.
- 32. Explain any four agile process models.

 $(3 \times 10 = 30 \text{ Marks})$
