17U561 (Pages: 2) Name: ……..

Reg. No……

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2019

(Supplementary/Improvement)

(CUCBCSS-UG)

CC15U BCS5 B11 - PRINCIPLES OF SOFTWARE ENGINEERING

(Computer Science – Core Course)

(2015 & 2016 Admissions)

Time: Three Hours Maximum: 80 Marks

Part A

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

1. …… software model is also called ad-hoc model.
2. …… is a technique of binding the data and functions together in a single unit called class.
3. …… activity manages the changes made in the software processes of the products throughout the life cycle of the software project.
4. …… is generally measured as mean time to failure.
5. How many maturity levels are there in CMM?
6. Say true/false: Coding guidelines are same for every programming language.
7. A design notation used for representing function oriented design is ……
8. …… testing is platform and language independent.
9. The White box testing is also called ……
10. Expand SRS

(10 x 1 = 10 Marks)

Part B

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

11. What are the types of software requirements?
12. What is refactoring?
13. Define Polymorphism.
14. What is a flow graph?
15. What is Recovery testing?

(5 x 2 = 10 Marks)

Part C

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

16. What are the characteristics of a software process?
17. Differentiate Verification and Validation.
18. What are the components of an SRS?
19. Write short note on Cyclomatic Complexity.
20. What are the various feasibility analysis techniques?
21. Differentiate top down and bottom up programming.
22. Define the following: Bug, Error, Fault, Failure.
23. What are the various components of a test plan?

(5 x 4 = 20 Marks)

Part D

Answer any ***five*** questions. Each question carries 8 marks.

24. Compare and contrast various software life cycle process.
25. Describe various requirement elicitation techniques.
26. Write note on: a) Abstraction mechanisms b) Concurrency
27. Explain various design methodologies in OOD.
28. Explain in detail various Cohesion and Coupling mechanisms.
29. Explain the need and application of Unified Modeling Language.
30. What are the various levels of software testing?
31. What are software metrics? What are the various types of metrics available?

(5 x 8 = 40 Marks)

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