

**18U561**

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Name: .....

Reg. No.....

**FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2020**

(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. What is software engineering?
2. What is software process?
3. What is SDLC?
4. Define software requirements.
5. What is activity diagram?
6. What is pattern?
7. What is software reengineering?
8. What is system testing?
9. What is the most important feature of spiral model?
10. If the requirements are frequently changing which process model is to be used?

**(10 x 1 = 10 Marks)**

**PART B**

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

11. What do you mean by maintenance phase?
12. Which is the goal of testing?
13. Name the various requirement elicitation techniques.
14. What is user defined data type?
15. What is module coupling?

**(5 x 2 = 10 Marks)**

**PART C**

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

16. Explain any three characteristics of a software process.
17. Explain prototyping model.
18. What are different steps in requirements engineering process?

19. Discuss various reverse engineering tools.
20. Write a short note on the incremental process model.
21. Explain the relationship between the process of testing and debugging of software.
22. What is coding methodology? What are the steps followed for software coding?
23. Write note on pattern based software design.

**(5 x 4 = 20 Marks)**

#### **PART D**

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

24. Discuss in detail the important software life cycle models.
25. Discuss various activities related to software quality assurance.
26. Explain the different steps in software re-engineering.
27. Give a detailed account of software testing strategies.
28. What are the different UML diagrams?
29. Discuss the different techniques for Black box testing in detail.
30. What is the difference between structured analysis and object-oriented analysis?  
Describe the concepts used in both of them.
31. Explain the characteristics and components of SRS.

**(5 x 8 = 40 Marks)**

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