18U561	(Pages: 2)	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?

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

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?

 $(5 \times 2 = 10 \text{ Marks})$

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.

 $(5 \times 4 = 20 \text{ Marks})$

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.

 $(5 \times 8 = 40 \text{ Marks})$
