

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2021 (CUCBCSS- UG)

CC17U BCS5 B10 - PRINCIPLES OF SOFTWARE ENGINEERING

(Computer Science – Core Course)

(2017, 2018 Admissions – Supplementary/Improvement)

Time: Three Hours Maximum: 80 Marks

PART A

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

- 1. Define Software Engineering.
- 2. Who is a stakeholder?
- 3. What is SRS?
- 4. What is meant by non-functional requirements?
- 5. Define Cohesion.
- 6. Define a usecase.
- 7. What is meant by Inheritance?
- 8. What is DFD?
- 9. What is beta testing?
- 10. What is Reengineering?

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

PART B

Answer all questions. Each question carries 3 marks.

- 11. Explain phases of SDLC.
- 12. Discuss White-box testing.
- 13. What is reverse engineering?
- 14. Discuss agile software development.
- 15. Explain Business Process Reengineering.

 $(5 \times 3 = 15 \text{ Marks})$

PART C

Answer any *five* questions. Each question carries 5 marks.

- 16. What is coupling? Explain the various types of coupling.
- 17. What is Debugging? Describe different debugging strategies.
- 18. Describe the Object-Oriented Design Concepts.
- 19. Write note on pattern based software design.

- 20. What is Sequence diagram? Explain with an example.
- 21. Describe briefly the concept of software quality.
- 22. Describe various requirement elicitation techniques used in requirements engineering.
- 23. What is meant by Software maintenance? Describe different types of Software maintenance.

 $(5 \times 5 = 25 \text{ Marks})$

PART D

Answer any *three* of the following. Each question carries 10 marks.

- 24. Discuss different levels of Software testing.
- 25. Describe a generic software process framework activities and umberlla activities.
- 26. Explain different types of diagrams and views supported by UML.
- 27. Describe general coding standards and guidelines
- 28. What is by Requirements Engineering? Describe the steps involved in Requirements Engineering.

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