20U554S	(Pages: 2)	Name:
		Reg. No:

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022 (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 the term software.
- 2. What is linear process flow?
- 3. What is meant by pattern?
- 4. What is prototyping paradigm?
- 5. Define Agile Modelling.
- 6. Who is a stakeholder?
- 7. Define Cohesion.
- 8. Define a class.
- 9. What is meant by alpha testing?
- 10. What is meant by BPR?

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

PART B

Answer all questions. Each question carries 3 marks.

- 11. Software act as a product and a vehicle for delivering a product. Explain.
- 12. Explain the different types of software process patterns.
- 13. What is an Use Case? What are its components?
- 14. Describe software quality dilemma.
- 15. Explain Reverse Engineering.

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

PART C

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

- 16. Describe different types of Software maintenance.
- 17. Describe the Object-Oriented Design Concepts.
- 18. Describe Interaction Diagram with example.
- 19. Describe different types of non-functional requirements.

- 20. Describe Spiral model to software development along with its advantages and disadvantages.
- 21. Software Engineering can be viewed as layered technology. Explain.
- 22. Describe the myths related to software management and their realities.
- 23. Describe Software Reengineering Process Model.

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

PART D

Answer any three questions. Each question carries 10 marks.

- 24. Describe a generic software process framework activities and umbrella activities.
- 25. What is meant by Requirements Engineering? Describe the steps involved in Requirements Engineering.
- 26. Explain different types of diagrams and views supported by UML.
- 27. Describe various features of modern programming languages.
- 28. What is testing? Describe various levels of software testing.

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