QP Code: D143675	**Total Pages:**1	**Name:**
		Register No.

FOURTH SEMESTER (CUFYUGP) DEGREE EXAMINATION, APRIL 2026

COMPUTER APPLICATION

BCA4CJ207 Software Engineering

2024 Admission onwards

Maximum Time :2 Hours **Maximum Marks :70**

Section A

All questions can be answered. Each Question carries 3 marks (Ceiling: 24 Marks)

1	Define Software Engineering. Explain the nature of software.
2	What is a Software Development Life Cycle (SDLC)? List its major phases.
3	State the principles of Agile development and explain the concept of Agility.
4	List the core values of Extreme Programming (XP).
5	Distinguish between functional requirements and non-functional requirements with examples.
6	What is Requirement Elicitation? Mention any two elicitation techniques.
7	Define Use Case and explain its purpose in requirement specification.
8	What is a Class Diagram? Mention its main components.
9	Define Verification and Validation in software testing.
10	What is Software Maintenance? List its types.

Section B

All questions can be answered. Each Question carries 6 marks (Ceiling: 36 Marks)

11	Explain the Waterfall Model with diagram. Discuss its advantages and limitations.
12	Describe the Incremental Process Model and explain how it differs from the Waterfall model.
13	Explain the Requirement Engineering Process and its major activities.
14	Discuss Natural Language Specification.
15	Explain Interaction Models in system modelling with Use Case modelling and Sequence diagrams.
16	Discuss Structural Models and explain Generalization and Aggregation in class diagrams.
17	Explain the strategies for conventional software testing.
18	Explain Business Process Reengineering (BPR) and describe the BPR Model.

Section C

Answer any one question. Each question carries 10 marks (1x10=10 Marks)

19	Explain Agile Software Development in detail. Compare Scrum and Adaptive Software Development as agile models.
20	Discuss Architectural Design in Software Engineering. Explain different architectural views and Layered Architecture with examples.