

2111000103020002

Second Year B.C.A. (Semester –III)

Examination March-2023

Software Engineering

Seat No:

--	--	--	--	--	--

[Time: Three Hours]

[Max. Marks:70]

Student's Signature

Q.1 Answer in short.

14

1. What is Software Engineering?
2. Define control coupling?
3. What is effort distribution?
4. Define fan-in and fan-out.
5. What is functional independence?
6. What is Horizontal Partitioning?
7. What is backward traceability?

Q.2 Answer the following questions.

(a) Explain different types of software.

7

OR

(a) Define software process model. Compare and contrast Waterfall and prototype model.

7

(b) Discuss software characteristics with diagram

7

OR

(b) Explain Spiral model with figure.

7

Q.3 Answer the following:

(a) Explain testing principles.

7

OR

(a) Explain different types of black box testing techniques.

7

(b) Explain the components of SRS.

7

OR

(b) Explain Use Case diagram with example.

7

Q.4 Answer any two:

14

1. Explain Modularity in detail.
2. Explain design heuristics.
3. Explain different types of cohesion.

Q.5 (a) Draw a DFD for Online Shopping System.

10

OR

(a) Draw a DFD for Inventory management System.

10

(b) Write Data Dictionary for above DFD.

2

(c) Write Process Specification for above DFD.

2