

Total No. of Questions : 20

Total No. of Pages : 01

Roll No. _____

Paper Code
2C8124

MCA II Sem(Main/Back) Exam 2026
MCA-204 Software Engineering & UML
2C8124

Time: 3 Hours

Maximum Marks: 70

Attempt all Ten questions from Part A. All Five questions from Part B and three questions out of five questions from Part C.

Schematic diagrams must be shown wherever necessary. Any data missing may suitably be assumed and stated clearly. Units of quantities used/ calculated must be stated clearly.

Use of following supporting material is permitted during examination (As mentioned in form No.205)

1. _____

2. _____

Part A (Word limit 25)

- Q.1 Define Software Engineering Paradigm.
- Q.2 What do you understand by Software Myths?
- Q.3 Define Data Dictionary.
- Q.4 What is SRS?
- Q.5 Define RMMM.
- Q.6 Differentiate between Single Variable and Multivariable Models.
- Q.7 Differentiate between Maintenance and Enhancement.
- Q.8 Write any two Characteristics of a good quality software.
- Q.9 What is State Diagram?
- Q.10 Define UML.

10 x 2 = 20

Part B (Word limit 100)

- Q.1 Explain RAD model in detail.
- Q.2 What are Structured Analysis Tools? Explain any two Structure Analysis Tools in brief.
- Q.3 Explain COCOMO model in detail.
- Q.4 Differentiate between Black Box Testing and White Box Testing.
- Q.5 Explain basic structure of UML.

5 x 4 = 20

Part C (Any three)

- Q.1 What is Software Process Model? Explain SDLC and associated phases in detail.
- Q.2 Explain Functional and Behavioral Modeling in detail.
- Q.3 Explain Putnam Resource Allocation Model in detail.
- Q.4 What is Software Testing? Explain different types of testing in detail.
- Q.5 What is Object Oriented Modeling? Explain its principles with respect to UML in detail.

3 x 10 = 30