

MCA Sem.-3 Examination
Object Oriented Software Engineering
December-2025

Time : 3.00 Hours]

[Max.Marks : 50

Instructions:

- Write both the Sections in the separate answer book.
- Both Sections having equal weightage.
- Draw Diagrams wherever necessary.
- Make Assumptions wherever necessary.

SECTION – I

Q-1 Explain the following terms with an appropriate example: (Each 3 9 Marks Marks)

- a. Explain Software Quality Assurance (SQA) and list its major tasks.
- b. What is the purpose of Requirement Elicitation?
- c. List the Object Oriented Methodologies. Explain any one in detail.

Q-2 Attempt the following : 8 Marks
Explain Prescriptive and Specialized SDLC models. Discuss Waterfall and Spiral Model with neat diagrams.

OR

Q-2 Attempt the following :
Explain the Agile Development Methodology in detail. Explain Scrum, XP in terms of principles and workflow.

Q-3 Attempt the following : 8 Marks
a. Describe Functional and Structural Testing.
b. Write a short note on ISO-9000 Quality Standards.

OR

Q-3 Attempt the following:
a. What is a Timeline Chart in project scheduling with any example having a diagram.
b. Explain the components of Interface Design.

SECTION – II

Q-4 Explain the following Terms with an appropriate example. (Each 3 9 Marks Marks)

- a. Describe various levels of testing with suitable examples.
- b. Analyze the risks involved in an online banking system (any three).

c. Write a difference between functional and non-functional requirements.

Q-5 Attempt the following:

Describe the Use Case Points (UCP) estimation method in detail. List steps, calculations, and influencing factors with an example.

8 Marks

OR

Q-5 Attempt the following:

Describe the Class Point estimation method in detail. List steps, calculations, and influencing factors with an example.

Q-6 Attempt the following:

An e-commerce platform allows users to browse products, add items to cart, place orders, track deliveries, and make payments. Admin manages products, categories, and order processing. Draw class diagram for above scenario.

8 Marks

OR

Q-6 Attempt the following:

Users create events, book venues, and manage guest lists. Admin manages event types, venue availability, and service providers. Draw any one UML diagram for this scenario.

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