

**MCA Sem.-3 Examination**  
**Object Oriented Software Engineering**  
**December-2024**

Time : 3-00 Hours]

[Max. Marks : 50

- NOTE :** (1) Write both the sections in the separate answer books  
(2) Figures to the right indicate full marks.  
(3) Make necessary assumptions wherever necessary.

**SECTION-I**

**Q.1 Define following terms.**

[9]

- 1 Use case
- 2 Software process
- 3 Polymorphism

**Q.2 Attempt the following.**

- (a) Differentiate between conventional and agile software development.
- (b) List steps in requirement engineering.

[4]

[4]

OR

- ~~Q.2~~ (a) Draw use case and activity diagram for 'add to cart' feature of any e-shopping website.
- (b) Explain function point method for estimating effort in software cost estimation.

[4]

[4]

**Q.3 Attempt the following.**

[8]

- (a) Explain object model, dynamic model and functional model. Explain with suitable examples.

OR

- ~~Q.3~~ (a) Explain any one method of estimating risk based on schedule.

**SECTION-II**

**Q.4 Define following terms (Any three)**

[9]

- 1 Software reliability
- 2 Defect Removal Effectiveness
- 3 CMM
- 4 Software metrics and indicators

**Q.5 (a) Explain different types of messages used in sequence diagram.**

[4]

(b) Explain any 4 software quality attributes.

[4]

OR

**Q.5 (a) Explain working of configuration control management.**

[4]

(b) Using a suitable class diagram, describe: generalization and aggregation.

[4]

**Q.6 Attempt the following (Any one)**

[8]

- (a) Draw state transition diagram of ATM system.

OR

- ~~Q.6~~ (a) With a suitable example, explain path testing.