



PJ – 579

III Semester M.C.A. Degree Examination, January 2019  
(CBCS Scheme)  
COMPUTER SCIENCE  
MCA 302 : Object Oriented Analysis and Design using UML.

Time : 3 Hours

Max. Marks : 70

*Instruction : Answer any five questions from Section – A and any four from Section – B.*

SECTION – A

Answer any five questions, each carries six marks. (5×6=30)

1. Discuss the advantages of OOAD. 6
2. Explain Views in UML. 6
3. Explain Ternary and Reflexive associations between classes with example. 6
4. Discuss 'coupling' and 'Cohesion'. 6
5. Explain flexibility guidelines for Behavioral design. 6
6. Discuss different 'Invocation schemes' w.r.t sequence Diagram. 6
7. Substantiate how sequence Diagram is different from Collaboration Diagram. 6
8. Explain Reuse of framework. Differentiate between white-Box framework and Black-Box framework. 6

SECTION – B

Answer any four questions, each carries ten marks. (4×10=40)

9. Explain the Object Oriented System Development Life Cycle. 10
10. a) Discuss the advantages of a class diagram. 5  
b) Draw a neat 'Class Diagram' for an "Order Processing System". 5

P.T.O.

PJ = 579



11. Explain the Extension Mechanism in UML.	10
12. Explain state diagram in detail with a suitable diagram.	10
13. Write short notes on : a) Deployment Diagram b) A Package.	5
14. a) Explain Process Architecture in detail. b) Discuss Reuse of Pattern.	5

SECTION - A

Answer any five questions. (5x5=25)

1. Discuss the advantages of OOAD.
2. Explain Views in UML.
3. Explain Ternary and Reflexive associations between classes with example.
4. Discuss 'coupling' and 'cohesion'.
5. Explain flexibility guidelines for Behavioral design.
6. Discuss different 'invocation schemes' w.r.t. sequence Diagram.
7. Substantiate how sequence Diagram is different from Collaboration Diagram.
8. Explain Reuse of framework. Differentiate between widget-Box framework and Black-Box framework.

SECTION - B

Answer any four questions, each carries ten marks.

1. Explain the Object Oriented System Development Life Cycle.
2. Discuss the advantages of a class diagram.
3. Draw a class diagram for an Order Processing System.



PG – 432

III Semester M.C.A. Examination, Jan./Feb. 2018  
(CBCS Scheme)  
COMPUTER SCIENCE

MCA 302 : Object Oriented Analysis and Design Using UML

Time : 3 Hours

Max. Marks : 70

*Instruction : Answer any five questions from Section – A and any four from Section – B.*

SECTION – A

Answer **any five** questions **each** carries **six** marks :

(5×6=30)

1. Define Object State, methods and messages with examples.
2. Discuss the advantages of OOAD paradigm.
3. Compare inheritance with aggregation with suitable example.
4. Explain the significance of visibility of attributes and operation in Static Models.
5. Explain components of a Usecase diagram with an example.
6. What is Cohesion ? Discuss the effects of cohesion in object oriented design with an example.
7. Explain events, signals and state machines with regard to state diagram.
8. Elaborate on the reuse of libraries and frameworks.

SECTION – B

Answer **any four** questions **each** carries **ten** marks :

(10×4=40)

9. Discuss Object oriented system development life cycle in detail.
10. Discuss building blocks of activity diagram and draw an activity diagram for order processing system.
11. Discuss in detail flexibility guidelines for class diagram design.
12. Draw the class diagram for the classes and relationships involved in ATM system.
13. Write a short note on :
  - a) Sequence diagram. 5
  - b) Collaboration diagram. 5
14. a) Explain process architecture in detail. 5  
b) Differentiate black box and white box framework. 5



PG – 265

III Semester M.C.A. Examination, January 2016  
(CBCS)  
COMPUTER SCIENCE  
MCA 302 : Object Oriented Analysis and Design using UML

Time : 3 Hours

Max. Marks : 70

SECTION – A

Answer **any five** questions **each** carries **6** marks : (5×6=30)

1. Define object state, methods and messages with examples.
- ~~2.~~ Discuss views in UML with a neat sketch.
3. Compare inheritance versus aggregation with suitable examples.
4. Explain the importance of visibility of attributes and operations when modelling static models.
- ~~5.~~ Discuss coupling and cohesion.
- ~~6.~~ Explain events, signals and state machines with regard to state diagrams.
- ~~7.~~ Substantiate how sequence diagram is different from collaboration diagram.
- ~~8.~~ What is reuse of Framework ? Differentiate between white box Framework and Black Box Framework.

SECTION – B

Answer **any four** questions **each** carries **10** marks : (4×10=40)

- ~~9.~~ Discuss Object Oriented System Development Life Cycle in detail.
- ~~10.~~ Discuss building blocks of Use Case Diagram and draw an Use Case Diagram for Library Management system.

P.T.O.



11. Draw the class diagram for the classes and their relationships involved in ATM System.
  12. Explain State diagram States in detail for the Library System with suitable sketches.
  13. Discuss in detail the flexibility Guidelines for Behavioral Design.
  14. Write short notes on :
    - a) Deployment Diagram. 5
    - b) Component Diagram. 5
-