



**SIDDHARTH GROUP OF INSTITUTIONS:: PUTTUR
(AUTONOMOUS)**

Siddharth Nagar, Narayanavanam Road – 517583

QUESTION BANK (DESCRIPTIVE)

Subject with Code: Object Oriented Analysis And Design Using UML(18MC9136)

Course & Branch: MCA

Regulation: R18

Year & Sem: III-MCA & I-Sem

**UNIT –I
INTRODUCTION TO UML**

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|----|---|--------------|-------|
| 1 | a) Explain the importance of modeling. | [L2][CO1] | [06M] |
| | b) Clearly explain principles of modeling. | [L2][CO1] | [06M] |
| 2 | Briefly explain object oriented modeling. | [L5][CO2] | [12M] |
| 3 | Clearly explain software development life cycle. | [L2][CO1] | [12M] |
| 4 | a) Explain the architecture of UML. | [L5][CO1] | [06M] |
| | b) What are the importances of modeling. | [L1][CO1] | [06M] |
| 5 | How the object oriented modeling is important? Discuss. | [L1][CO2] | [12M] |
| 6 | Explain the conceptual model of the UML. | [L2][CO1] | [12M] |
| 7 | Define modeling. Describe the architecture. | [L1,L5][CO1] | [12M] |
| 8 | Identify and explain the role of conceptual model. | [L3][CO1] | [12M] |
| 9 | List out the principles of modeling. Discuss about software development life cycle. | [L4,L6][CO1] | [12M] |
| 10 | Discuss about object oriented modeling and conceptual model. | [L6][CO2] | [12M] |

UNIT –II**BASIC STRUCTURAL MODELING AND ADVANCED STRUCTURAL MODELING**

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|----|---|--------------|-------|
| 1 | Write a brief description on Classes and relationships. | [L6][CO2] | [12M] |
| 2 | Clearly explain the common mechanisms in basic structural modeling. | [L2][CO3] | [12M] |
| 3 | a) Write a brief note on advanced classes. | [L5][CO2] | [06M] |
| | b) Explain advanced relationships. | [L5][CO2] | [06M] |
| 4 | a) Write a brief description on interfaces in advanced structural modeling. | [L2][CO2] | [06M] |
| | b) What are the types and roles? Explain. | [L1,L2][CO2] | [06M] |
| 5 | Define Package. Explain the importance of package. | [L6][CO2] | [12M] |
| 6 | Listout advanced relationships and explain them. | [L4][CO2] | [12M] |
| 7 | a) Describe the types and roles. | [L2][CO2] | [06M] |
| | b) Discuss about ER diagram. | [L6][CO2] | [06M] |
| 8 | List out the modeling techniques for Class and object diagrams. Explain. | [L2][CO2] | [12M] |
| 9 | Briefly explain advanced structural modeling. | [L3][CO2] | [12M] |
| 10 | a) Write a short note on Common mechanisms. | [L2][CO2] | [06M] |
| | b) Discuss about relationships. | [L6][CO2] | [06M] |

UNIT –III**CLASS ,OBJECT DIAGRAMS AND BASIC BEHAVIORAL MODELING**

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|-----------|---|--------------|-------|
| 1 | What are the terms and concepts of class and object diagrams? Explain. | [L1,L2][CO3] | [12M] |
| 2 | What are the modeling techniques for class and object diagrams? Explain. | [L1,L2][CO3] | [12M] |
| 3 | Briefly discuss about Class and object diagrams by constructing examples. | [L6][CO3] | [12M] |
| 4 | a) Define an Interaction. | [L1][CO3] | [02M] |
| | b) Explain interaction diagrams with neat sketch. | [L5][CO3] | [10M] |
| 5 | a) What are the importances of Usecase diagram? | [L1][CO3] | [06M] |
| | b) Explain use case diagram with library management system. | [L2][CO3] | [06M] |
| 6 | a) How the activity diagram useful? | [L1][CO3] | [06M] |
| | b) Explain activity diagram with example. | [L2][CO3] | [06M] |
| 7 | a) What are the importances of Basic behavioral modeling. | [L1][CO3] | [06M] |
| | b) Explain interaction diagram with example. | [L2][CO3] | [06M] |
| 8 | List out the modeling techniques for collaboration diagram and explain with your own example. | [L4][CO3] | [12M] |
| 9 | Build your own example for use case diagram and explain. | [L3][CO3] | [12M] |
| 10 | a) Build example diagram for sequence diagram. | [L3][CO3] | [06M] |
| | b) Construct and explain collaboration diagram with your own example. | [L6][CO3] | [06M] |

UNIT –IV**ADVANCED BEHAVIORAL MODELING**

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| 1 | a) Define and explain events & signals.
b) Explain state machines. | [L1,L2][CO1] [06M]
[L2][CO1] [06M] |
| 2 | Briefly explain processes and threads. | [L5][CO1] [12M] |
| 3 | What is signal? Explain state chart diagrams. | [L1,L2][CO1] [12M] |
| 4 | a) What are the uses of state chart diagram?
b) Construct example diagram for statechart diagram and explain. | [L1][CO1] [06M]
[L3][CO3] [06M] |
| 5 | Discuss about architectural modeling. | [L6][CO1] [12M] |
| 6 | Construct and explain Component diagram with example. | [L3][CO3] [12M] |
| 7 | Build and explain example diagram for Deployment diagram. | [L2,L3][CO3] [12M] |
| 8 | a) Identify the modeling techniques for deployment diagram.
b) How can construct component diagrams. | [L3][CO1] [12M]
[L1][CO3] [12M] |
| 9 | Listout uses, modeling techniques for statechart diagram and explain with example. | [L4][CO1] [12M] |
| 10 | Explain the following.
a) Component diagram b) Deployment diagram | [L5][CO3] [12M] |

UNIT –V**PATTERNS AND FRAMEWORKS, ARIFACT DIAGRAMS**

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|-----------|---|--------------|-------|
| 1 | What are the patterns and frameworks in UML? Explain. | [L1,L2][CO4] | [12M] |
| 2 | a) Define patterns in UML. | [L1][CO4] | [04M] |
| | b) List out and explain patterns. | [L4][CO4] | [08M] |
| 3 | What are the frameworks used in UML? Explain. | [L1,L2][CO4] | [12M] |
| 4 | a) Briefly explain patterns. | [L2][CO4] | [03M] |
| | b) Discuss about frameworks. | [L6][CO4] | [09M] |
| 5 | Discuss about the unified real time application. | [L6][CO4] | [12M] |
| 6 | a) What is real time application? | [L1][CO4] | [02M] |
| | b) What are the examples for real time application? Give brief description on that. | [L1,L5][CO4] | [10M] |
| 7 | Identify how frameworks are useful in UML? Explain. | [L3][CO4] | [12M] |
| 8 | What is pattern? Discuss the advantages of patterns in UML. | [L1,L6][CO4] | [12M] |
| 9 | How the real time application can developed by using UML? | [L1][CO4] | [12M] |
| 10 | Briefly discuss about unified real time application. | [L6][CO4] | [12M] |

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