

Hall Ticket Number :

--	--	--	--	--	--	--	--	--	--

**R-20**

**Code: 20DF32T**

M C A III Semester Supplementary Examinations September 2023

**Object Oriented Modelling and Design with UML**

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit ( 5 x 12 = 60 Marks )

\*\*\*\*\*

**UNIT-I**

1. a) Explain about architecture of the UML? 6M
- b) What is software development life cycle? explain it briefly. 6M

**OR**

2. a) What are the principles of modelling? Explain it in detail 6M
- b) Explain about object oriented modelling ? 6M

**UNIT-II**

3. a) Write briefly about the concept of Package? 6M
- b) What is relationships? explain common modeling techniques of relationships? 6M

**OR**

4. a) What is a class? explain the common modelling techniques of a class? 6M
- b) Explain the concept of advanced relationships in structural modelling ? 6M

**UNIT-III**

5. a) Write briefly about interaction diagrams and its relationships? 6M
- b) Write briefly about usecases? 6M

**OR**

6. a) Explain briefly about activity diagrams? 6M
- b) Write a short note on common modelling technique of usecase diagrams? 6M

**UNIT-IV**

7. a) Write a short note common modelling techniques of Events and Signals? 6M
- b) Explain briefly about the concept state diagrams? 6M

**OR**

8. a) Write about terms and conditions of Processes and Threads? 6M
- b) List and explain about Terms and Concepts of State machines? 6M

**UNIT-V**

9. a) Write briefly about the concept of Component diagrams? 6M
- b) Explain briefly about the common modelling techniques of Deployment diagrams? 6M

**OR**

10. a) Write briefly about the concept of Deployment? 6M
- b) Explain about common modelling techniques of Components? 6M

\*\*\*

Hall Ticket Number :

--	--	--	--	--	--	--	--	--	--	--

**R-20**

**Code: 20DF31T**

M C A III Semester Supplementary Examinations September 2023

**Web Technologies**

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit ( 5 x 12 = 60 Marks )

\*\*\*\*\*

	Marks	CO	BL
<b>UNIT-I</b>			
1. a) Explain the concept of classes and object with examples.	6M	CO1	L2
b) Explain the term Recursion using any example program.	6M	CO1	L2
<b>OR</b>			
2. a) Explain the concept of Inheritance, types and benefits of Inheritance with example.	6M	CO1	L2
b) What is polymorphism? Explain method overloading and overriding with an example.	6M	CO1	L2
<b>UNIT-II</b>			
3. a) Write a java program to find the factorial value of the given number using user defined package concept?	6M	CO2	L3
b) What is Multithreading? What are the ways to create multiple threads in java?	6M	CO2	L1
<b>OR</b>			
4. a) What is an abstract class? Explain any two cases to implement abstract class?	6M	CO2	L2
b) Explain about Thread Life Cycle?	6M	CO2	L3
<b>UNIT-III</b>			
5. a) What is HTML? Explain about Form Controls with example.	6M	CO3	L3
b) Explain about CSS with example programs.	6M	CO3	L3
<b>OR</b>			
6. a) Design A JavaScript to display whether given number is prime or not?	6M	CO3	L6
b) How can both Internal and External DTDs be used in an XML File? Show with an Example?	6M	CO3	L1
<b>UNIT-IV</b>			
7. a) Distinguish between Get request and Post request type in Servlets?	6M	CO4	L2
b) Discuss about Session tracking in Servlets with a suitable example?	6M	CO4	L2
<b>OR</b>			
8. a) Discuss how to handle Request and Response in Servlets.	6M	CO4	L2
b) Explain JSP Processing with neat diagram.	6M	CO4	L2
<b>UNIT-V</b>			
9. a) Explain about the JDBC Drivers?	6M	CO5	L2
b) Explain Various steps involved in accessing database from JSP page?	6M	CO5	L2
<b>OR</b>			
10. a) How to develop JSP Application? Explain the Directive Elements of JSP?	6M	CO5	L1
b) Explain about the anatomy of jsp?	6M	CO5	L2

\*\*\*\*END\*\*\*\*

Hall Ticket Number :

--	--	--	--	--	--	--	--	--	--	--

**R-20**

**Code: 20DF34T**

M C A III Semester Supplementary Examinations September 2023

### **Big Data Analytics**

Max. Marks: 60

Time: 3 Hours

Answer all five units by choosing one question from each unit ( 5 x 12 = 60 Marks )

\*\*\*\*\*

	Marks	CO	BL
<b>UNIT-I</b>			
1. a) Define Big Data and explain the drivers for big data.	6M	CO1	L2
b) Briefly discuss about four V's of Big Data. Give two examples of Big Data.	6M	CO1	L2
<b>OR</b>			
2. a) Discuss various sources of big data.	6M	CO1	L2
b) Determine the applications of Big Data analytics.	6M	CO1	L3
<b>UNIT-II</b>			
3. a) Distinguish between the cloud and the big data.	6M	CO2	L2
b) How predictive analytics is useful in organizations?	6M	CO2	L1
<b>OR</b>			
4. Describe Mobile Business Intelligence in detail with an example.	12M	CO2	L2
<b>UNIT-III</b>			
5. Name strategies that organizations can implement to effectively create and develop talent for data science roles, and what are the key skills and knowledge areas that should be emphasized in such training programs?"	12M	CO3	L2
<b>OR</b>			
6. Illustrate some key considerations for setting up the right organizational structure to support the institutionalization of analytics within an organization.	12M	CO3	L4
<b>UNIT-IV</b>			
7. Define Data Orchestration and assess its need for Analysis?	12M	CO4	L5
<b>OR</b>			
8. a) How Big Data governance is handled in organizations. .	6M	CO4	L1
b) List and explain the stages of Analytics maturity model.	6M	CO4	L2
<b>UNIT-V</b>			
9. a) Illustrate the design of HDFS in detail.	6M	CO5	L2
b) Explain Hadoop Map Reduce with an example.	6M	CO5	L2
<b>OR</b>			
10. List and explain the main advantages of Hadoop Map Reduce for big data processing and analytics, and how do these advantages translate into benefits for organizations in terms of scalability, cost-effectiveness, and flexibility?	12M	CO5	L2

\*\*\*\*END\*\*\*\*