Name: Student University Roll No.:	Printed Pages: 1
School of Engineering Second Sessional Examination, Odd Semester (AS: 2023-24) B. Tech: CSE [Year: 2nd] [Semester: 3rd]	
Course Title: Object Oriented Analysis & Design (using UML) Course Code: BCS3302	Max Marks: 60 Time: 3*hrs*

Instructions if any: Read the question Carefully.

	SECTION 'A' **Q.N.1. Attempt all parts of the following:**	**Course Objective**	**Marks**
a)	List the relationship used in use case diagram.	**CO3**	**1**
b)	What is state chart diagram?	**CO4**	**1**
c)	What do you mean by swimlanes?	**CO4**	**1**
d)	Define events and signals in respect to modelling.	**CO4**	**1**
e)	Differentiate between aggregation and composition.	**CO5**	**1**
f)	What are "active classes"?	**CO3**	**1**
g)	Explain the purpose of Interaction diagram?	**CO2**	**1**
h)	What is UML?	**CO1**	**1**
	SECTION 'B' **Q.N.2. Attempt any two parts of the following:**	**Course Objective**	**Marks**
a)	What do you mean by Use case diagram? Draw a use case diagram for online shopping.	**CO5**	**6**
b)	What do you mean by modeling? Discuss several purpose served by models with suitable examples.	**CO1**	**6**
c)	What is class diagram? Draw a class diagram for online railway reservation system.	**CO4**	**6**
d)	Write short note on object oriented software life cycle.	**CO2**	**6**
	SECTION 'C' **Q.N.3. Attempt any two parts of the following:**	**Course Objective**	**Marks**
a)	What do you mean by Object oriented technology? Discuss the pros and cons of object oriented technology with suitable example.	**CO1**	**5**
b)	Differentiate between process and thread.	**CO2**	**5**
c)	What do you mean class diagram. Draw a class diagram for library management system.	**CO3**	**5**

	Q.N.4. Attempt any two parts of the following:	**Course Objective**	**Mar**
a)	What do you mean by Interaction diagram? Also explain the notation used in Interaction diagram with example.	**CO4**	**5**
b)	Explain Fork in detail.	**CO4**	**5**
c)	Explain conceptual model of the UML?	**CO1**	**5**
	Q.N.5. Attempt any two parts of the following:	**Course Objective**	**Mar**
a)	What do you mean by Sequence Diagram? Explain various terms and symbols used in sequence diagram.	**CO4**	**5**
b)	What do you mean by state diagram? Draw state diagram for making a phone call.	**CO5**	**5**
c)	Explain the architecture of UML?	**CO1**	**5**
	Q.N.6. Attempt any two parts of the following:	**Course Objective**	**Mar**
a)	Explain characteristics of use case diagram in detail.	**CO5**	**5**
b)	Explain Deployment diagram with example?	**CO5**	**5**
c)	Explain UML relationship in detail.	**CO3**	**5**

Table 1: Mapping between COs and questions
(Number of COs may vary from course to course)

COs	Questions Numbers	Total Marks
CO1	1h,2b,3a,4c,5c	22
CO2	1g, 2d, 3b	12
CO3	1a, 1f,3c, 6c	12
CO4	1b,1c,1d, 2c, 4a,4b, 5a	24
CO5	1e, 2a, 5b,6a,6b	22