## Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur) Department of Computer Science and Engineering

### B.Tech In-Semester Examination-I, September- 2023

Course Name	:	Advanced Database Systems	Course Code:	CSE703
Day & Date	:	Wednesday, 27/09/2023	Max Marks :	40Marks
Time	:	9.15AM to 10.45AM		

### **Instructions:**

i. All questions are compulsory

ii. Figures to the right indicates full marks, Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2- Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 - Creating)
iii. Use of non-programmable calculator is allowed

iv. Assume suitable data if required

Course Outcomes:					
COs	At the end of the successful completion of the course, the students will be able to	Bloom's Taxonomy			
CO1	Apply the knowledge of PL/SQL in writing queries.	Apply			
CO2	Construct appropriate databases for real-world problems.	Evaluate			
CO3	Demonstrate the use of data mining & amp; data warehousing techniques in business data analytics.	Apply			
CO4	Illustrate design, architectures, data storage, distribution &query processing in Parallel &distributed databases.	Apply			
CO5	Construct a database using the SQL security features.	Create			

		Marks	B.L	CO
Q.1	Attempt any two			
a)	Explain the features & advantages of PL/SQL.	7	L2	
b)	Give the definition for PL/SQL Function? Explain the syntax of creating function at 1. Schema Level & 2. Inside PL/SQL Bock.	7	L6	CO1
c)	Write a PL/SQL Function inside PL/SQL block to find the total number of employees working for company 'TCS' and getting salary more than Rs.50,000. Call the same within the PL/SQL Block. Refer the following table, Employee(EID,Ename,Salary,Company,Location)	7	L6	

## Q.2 Attempt any two

a)	Quote the definition for PL/SQL Procedure? Explain the syntax of creating procedure at 1. Schema Level & 2. Inside PL/SQL Bock	7	L6	
b)	Write a PL/SQL procedure at schema level to find the factorial of a number and call the same in a PL/SQL Block.	7	L6	CO1
c)	Illustrate structured Data Types in Object Oriented Databases.	7	L2	
Q.3	Attempt any two			
a)	Describe Embedded SQL? Illustrate the Structure of Embedded SQL.	6	L3	
b)	Define Oracle Sequence? Describe the syntax for creating Sequence. Create a sequence for generating Students Id's for a table Student(Student_ID,Name,Class,Branch).	6	L6	CO2
c)	Describe Object Oriented Database? Illustrate with example.	6	L3	



.

### SWVSM'S Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur) Department of Computer Science and Engineering

## B.Tech In-Semester Examination-II, October- 2023

Course Name	:	Advanced Database Systems	Course Code:	CSE703
Day & Date	:	Saturday, 28/10/2023	Max Marks :	40 Marks
Time	:	9.15AM to 10.45AM		

### **Instructions:**

i. All questions are compulsory

- ii. Figures to the right indicates full marks, Course Outcome (CO) & Bloom's Taxonomy Level
   (BL) (L1- Remembering, L2- Understanding, L3 Applying, L4 Analyzing, L5 Evaluating, L6 Creating)
- iii. Use of non-programmable calculator is allowed
- iv. Assume suitable data if required

Course	Course Outcomes:				
COs	At the end of the successful completion of the course, the students will be able to	Bloom's Taxonomy			
CO1	Apply the knowledge of PL/SQL in writing queries.	Apply			
CO2	Construct appropriate databases for real-world problems.	Evaluate			
CO3	Demonstrate the use of data mining & amp; data warehousing techniques in business data analytics.	Apply			
CO4	Illustrate design, architectures, data storage, distribution &query processing in Parallel & distributed databases.	Apply			
CO5	Construct a database using the SQL security features.	Create			

		Marks	B.L	CO
Q.1	Attempt any two			
a)	Describe in detail the Data Warehouse with architecture	7	L2	
b)	Elaborate OLAP Operations	7	L3	CO3
c)	Outline the Key-Value Database	7	L2	
Q.2	Attempt any two			
a)	Explain Data Management with distributed databases	7	L5	CO4
b)	Illustrate Star schema with example	7	L6	04
c)	Give a brief note on Tree-Structured Rules & Write Decision	7	L6	
	Tree Induction Schema.			

## Attempt any two

a)	What is view materialization? List Issues in view	6	L5	
	materialization.			CO2
b)	Write and elaborate the algorithm for finding frequent	6	L5	COS
	item sets.			
c)	Quote the definition for Data Mining. State the use of	6	L5	
	association rules in data mining.			



# Q.3

SWVSM's

Seat No.

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

### Final year B. Tech (Semester-VII)

#### tor Examination December- 2023 JCom

	End Semester Examination, December-	2023		
Course Name	: Advanced Database Systems Co	ourse Code:	<b>CSE703</b>	
Day & Date	: Saturday,23 Dec 2023 M	ax Marks :	60 Mark	S
Time	: 10:00 am to 12:00 pm			
Instructions:	1. All questions are compulsory			
	2. Figures to the right indicates full marks, Course Ou	tcome (CO) &	z Bloom's	Taxonomy
	Level (BL) (L1-Remembering, L2- Understanding, L3 Evaluating, L6 - Creating)	- Applying,	L4 – Anal	yzing, L5 -
	3. Use of non-programmable calculator is allowed			
	4. Assume suitable data if required.			
		Marks	B.L	CO
0.1	Attempt any two	12		
a)	Define PL/SQL Procure. Explain the syntax of creating PL/SQL		16	
	Procure at 1. Schema level 2. Inside Pl/SQL Block.		LO	CO 1
b)	Explain inheritance in ORDBMS with respect to following:		L6	001
	i) Type inheritance ii) Binding methods			
c)	Write a brief note on embedded SQL.		L6	
Q.2	Attempt any two	12		
a)	What is NoSQL? Explain types of NoSQL databases in detail.		L4	CO 2
b)	Why are views important in decision support environment? H	ow		
	are views related to data warehousing and OLAP? Explain	the	L2	
	query modification technique for answering queries over vie	WS	-	CO3
	and decision support.	- 1		
c)	What is a cluster? Describe the K-Means clustering algorithm w	/ith	L2	
	an example.	10		
Q.3	Attempt any two	12		
a)	What are parallel database systems? Explain Speedup and Scal	eup	L2	
	in parallel database systems with the help of diagrams.	221		CO4
b)	Explain two phase commit (2PC) protocol. How 2PC proto	r	L4	0.04
	handles failure of a participating site and failure of a coordinato		1.4	
()	Explain now to store data in distributed database systems.			

Q.4	Attempt any two	12		
a)	Explain Discretionary Access Control based on Granting and Revoking Privileges.		L3	
b)	Explain role of DBA with respect to security.		L2	C05
c)	Explain Mandatory access control.		L2	
Q.5	Attempt any two	12		
a)	Compare data partitioning techniques used in parallel databases.		L4	CO4
b)	Draw and describe data warehouse architecture.		L2	CO3
c)	Describe oracle sequence. Explain sequence in Oracle with syntax and example.		L6	C01
d)	Compare RDBMS, ORDBMS and OODBMS.		L4	CO2

Roll No.

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

## **Department of Computer Science and Engineering**

## B. Tech In-Semester Examination-I, September- 2023

Course Name	:	Artificial Intelligence	Course Code:	<b>CSE701</b>
Day & Date	:	Tuesday, 30/09/2023	Max Marks :	40Marks
Time	:	9.15 AM to 10.45AM		

Instructions: i. All questions are compulsory.

ii. Figures to the right indicate full marks.

iii. Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2-Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 - Creating)

iv. Use of non-programmable calculator is allowed. v. Assume suitable data if required

**Course Outcome's are:** 

**CO1-** Implement knowledge of agent architecture, searching, and reasoning techniques for different applications.

CO2- Investigate Searching and Inference Techniques.

CO3- Establish knowledge base sentences using propositional logic and first-order logic.

CO4 -Illustrate the application of probability in uncertain reasoning.

CO5-Assess the AI expert systems using engineering knowledge.

		Marks	B.L	СО
Q.1	Attempt any two			
a)	What is AI? Describe the four categories under which AI definition is classified.	7	L2	
b)	Define Intelligent Agent? Explain relationship between Agent and Environment.	7	L1	CO1
c)	Discuss the PEAS description of the task environment for an automated taxi.	7	L3	
Q.2	Attempt any two			
a)	Discuss the State Space for the Vacuum World with suitable diagram.	7	L2	
b)	Write an algorithm for the general Tree Search with an example	7	L3	$CO^2$
c)	<ul><li>Illustrate the following search Technique with the help of an example.</li><li>i. Breadth First Search.</li><li>ii. Depth First Search.</li></ul>	7	L4	002
Q.3	Attempt any two			
a)	Define Structure of Agent? List the types of agents and explain any one in brief.	6	L2	CO1
b)	How to measure the Problem Solving Performance? Explain in brief?	6	L2	
c)	Describe the Concept of Rationality?	6	L3	



#### SWVSM'S

## Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur) Department of Computer Science and Engineering

## B. Tech In-Semester Examination-I, October- 2023

Course Name	:	Artificial Intelligence	Course Code:	<b>CSE701</b>
Day & Date	:	Monday, 26/10/2023	Max Marks :	40Marks
Time	:	9.15 AM to 10.45AM		

Instructions: i. All questions are compulsory.

ii. Figures to the right indicate full marks.

iii. Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2-Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 - Creating)

iv. Use of non-programmable calculator is allowed. v. Assume suitable data if required

**Course Outcome's are:** 

CO1- Implement knowledge of agent architecture, searching, and reasoning techniques for different applications.

CO2- Investigate Searching and Inference Techniques.

CO3- Establish knowledge base sentences using propositional logic and first-order logic.

CO4 -Illustrate the application of probability in uncertain reasoning.

CO5-Assess the AI expert systems using engineering knowledge.

		Marks	B.L	CO			
Q.1	Attempt any two						
a)	What is Greedy Best First search? Explain different Stages of	7	L2				
	Greedy Best First search with examples						
b)	b) Define Propositional logic? Explain types of Sentences with Syntax 7 L2						
	and Semantics.						
c)	c)Explain following terms with FOL with Examples?7L3						
	i. Atomic Sentence						
	ii. Complex Sentences						
	iii. Quantifiers						
Q.2	Attempt any two						
a)	Demonstrate Wumpus World Problem and its solution?	7	L2				
b)	Discuss Heuristic Search function? How this function helps during search procedure?	7	L3	CO4			
c)	Explain in detail Inference in First Order Logic with examples?	7	L4				
	l		11				
Q.3	Attempt all						
a)	Distinguish between propositional Logic and First Order logic?		L2	CO3			
b)	b) Explain A*search Algorithm 6 L4						
c)	Write note on Knowledge based Agent? Explain Backus Naur Form grammar?	6	L3				



Seat No.

SWVSM's

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

41440041240		Gratenasuus	Final Year B.Tech.(Comp. Sci. and Engg.) (Ser End Semester Examination,December-2023	n-VII)			
	C	Course 1	Name : Artificial Intelligent Course Cod	e: CSE70	1		
	Γ	Day & E	Date : Tuesday, 19-Dec-2023 Max Marks	60 Mar	ks		
	T	ïme	: 10:00 am to 12:00 pm				
Instru	uct	ions:	a) All questions are compulsory				
			b) Figures to the right indicates full marks, Course Outcome (CO) &	Bloom's	Taxonon	ny Level	
			<ul> <li>(BL)(L1-Remembering, L2- Understanding, L3 – Applying, L4 – Anal Creating)</li> <li>c) Use of non-programmable calculator is allowed</li> </ul>	yzing, L5 –	Evaluat	ing, L6 -	
			d) Assume suitable data if required.				
CO		1. 2.	Implement knowledge of agent architecture, searching, and reasoning techniques for different applications. Investigate Searching and Inference Techniques.				
		3. 4.	Establish knowledge base sentences using propositional logic and first-order logic. Illustrate the application of probability in uncertain reasoning.				
		5.	Assess the AI expert systems using engineering knowledge.	Marks	B.L	со	
0.1		Attem	pt any two				
0	a)	Define	AI? What are the applications of Artificial Intelligence?	6	L1		
ł	<b>)</b>	Enlist	PEAS description for different agent types.	6	L2	C01	
c	2)	Descri	be a model-based reflex agent along with its function.	6	L2		
Q.2		Attem	apt any two				
8	a)	Find t Here '	he shortest path from Start node to Goal node using A * algorithm. S' is starting node and 'G' is goal node and Provide a step-by-step	6	L5		



CO2

	b)	Define Heuristic Function? Explain different stages in Greedy Best First	6	L2	
		Search?			
	c)	Describe Wumpus World Problem and its solution?	6	L4	
Q.3		Attempt any two			
	a)	Enlist the Backus Naur Form for propositional logic and its standard logical equivalence?	6	L4	
	b)	Distinguish between Propositional Logic and First Order Logic.	6	L1	CO3
	c)	Write a note on Forward Chaining and Backward chaining.	6	L2	
Q.4		Attempt any two			
	a)	Describe the detail the steps involved in the knowledge engineering process?	6	L4	
	b)	What is Expert system? Sketch and explain the Components of an Expert System Shell?	6	L2	CO5
	c)	List the Characteristics of Expert System? Explain Rule based expert system.	6	L4	
Q.5		Attempt all			
	a)	State BAYES'RULE with simple case study of Toothache and Cavity.	6	L3	66.4
	• •	OR	and the		CO4
	b)	What is Probability? Explain Probability axioms	6	L2	
-	c)	Explain Concept of Rationality?	6	L2	
		OR			
	d)	Distinguish between BFS and DFS with example.	6	L1	CO1

D

Roll No.

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

## **Department of Computer Science and Engineering**

## B. Tech In-Semester Examination-I, September- 2023

Course Name :	Cloud Computing	Course Code: CSE702
Day & Date :	Tuesday, 26/09/2023	Max Marks : 40Marks
Time :	9.15 AM to 10.45AM	

### **Instructions:**

i. All questions are compulsory

ii. Figures to the right indicates full marks,

iii. Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2- Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 - Creating)

iv. Use of non-programmable calculator is allowed v. Assume suitable data if required

**Course Outcome's are: CO1**- Describe the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing.

**CO2-**Demonstrate the architecture and infrastructure of cloud computing

CO3-Identify problems, and explain, analyze, and evaluate various cloud computing solutions.

CO4-Use AWS cloud for designing solutions to various computational problems.

		Marks	B.L	CO
Q.1	Attempt any two			
a)	Define the cloud computing and what the silent feature of the cloud is computing?	7	L1,L2	CO1
b)	What are cloud and other similar cloud configurations?	7	L3	cor
c)	List the advantages and disadvantage of the cloud computing?	7	L1	
Q.2	Attempt any two			
a)	Describe typical virtualization structure with suitable diagram And list its types and benefits.	7	L1,L2	000
b)	Explain the Full virtualization and Paravirtualization.	7	L2	02
c)	Explain Hosted Virtualization structure with necessary diagram and list its benefits and drawbacks.	7	L1	
Q.3	Attempt All			
a)	Write short note components of cloud computing.	6	L1	
	OR	6		CO1
a)	What are the impacts of cloud computing on businesses?		L2	
b)	Describe virtualization mechanism.	6	L2	
	OR			
b)	Explain Bare Metal Virtualization structure with necessary diagram and list its benefits and drawbacks.	6	L2	CO2



#### SWVSM's

### Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur) Department of Computer Science and Engineering

## B. Tech In-Semester Examination-II, October- 2023

Course Name	:	Cloud Computing	Course Code: CSE702
Day & Date	:	Friday and 27/10/2023	Max Marks : 40Marks
Time	:	9.15 am to 10.45 am	

#### **Instructions:**

i. All questions are compulsory

ii. Figures to the right indicates full marks,

iii. Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2- Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 - Creating)

iv. Use of non-programmable calculator is allowed v. Assume suitable data if required

#### **Course Outcome's are:**

**CO1-** Describe the main concepts, key technologies, strengths, and limitations of cloud computing and the possible applications for state-of-the-art cloud computing.

CO2- Demonstrate the architecture and infrastructure of cloud computing.

CO3- Identify problems, and explain, analyze, and evaluate various cloud computing solutions.

CO4- Use AWS cloud for designing solutions to various computational problems.

			Marks	B.L.	CO
Q.1		Attempt any Two			
	a)	Describe Infrastructure as a Service.	7	L1	
	b)	Enlist the guidelines for selecting a PaaS provider.	7	L1	CO2
	c)	Explain Database as a Service and list the few factors to consider before selecting one for your database.	7	L3	
Q.2		Attempt any Two			
	a)	What are the challenges with the cloud data?	7	L1	
	b)	Define data confidentiality and encryption.	7	L2	CO3
	c)	Draw and explain AAA model.	7	L2	
Q.3		Attempt All			
	a)	Describe SaaS with ASP.	6	L2	
		OR			CO2
	a)	Explain storage as a service.	6	L1	
	b)	Illustrate host security for, 1.SaaS 2.PaaS 3. IaaS	6	L3	
		OR			CO3
	b)	Write a note on I) Data Availability II) Data Integrity.	6	L4	



Seat No.

SWVSM's

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

	Final year B. Tech (Comp. Sci & Engg) (Semester-VII End Semester Examination December-2023	()		
	Course Name :Cloud ComputingCourse CodeDay & Date :Thursday, 21-Dec-2023Max MarksTime :10:00 am to 12:00 pm	e CSE-702 60 Marks		
Instr	uctions: a) All questions are compulsory		ingen in engledigen f	an Balanda kana sa kana kana kana kana kana kana
	<ul> <li>b) Figures to the right indicates full marks, Course Outcome (Course) (BL)(L1-Remembering, L2- Understanding, L3 - Applying, L4 - Creating)</li> <li>c) Use of non-programmable calculator is allowed</li> <li>d) Assume suitable data if required.</li> </ul>	O) & Bloom' Analyzing, L	's Taxonor 5 – Evalua	ny Level ting, L6 -
		Marks	B.L	CO
01	Attempt any two	12		
Q.1	a) What are the impacts of cloud computing on businesses?	6	L2	CO 1
	b) Explain the Full virtualization in detail	6	L3	CO 1
	c) Explain types of cloud.	6	L2	CO 1
0.2	Attempt any two	12		
	a) Explain host security for IaaS.	6	L2	CO 2
	b) Describe SaaS with Application Service Provider with any case study	6	L3	CO 2
	c) Illustrate host security for, 1)SaaS2) PaaS 3) IaaS	6	L4	CO 2
03	Attempt any two	12		
Q.5	a) Difference between Kubernetes and Docker?	6	L3	CO 3
	b) Describe Xen Architecture and Guest OS management?	6	L1	CO3
	<ul> <li>c) Explain following terms: 1) Docker objects 2) Docker Storage</li> <li>3) Docker Networking</li> </ul>	6	L2	CO3
~ (	5) Dockeritetworking	12		
Q.4	a) List and describe Features of Amazon EC2	6	L2	CO 4
	<ul> <li>b) Explain types of cloud storage in AWS and enlist storage offered by AWS</li> </ul>	6	L2	CO 4
	c) Explain AWS compute and its services.	6	L2	CO 4
0.5	Attempt any two	12		
Q.5	a) Explain Authorization management in the cloud	6	L2	<b>CO</b> 4
	b) Classify virtual machine and containers?	6	L3	CO 3
	a) Draw and explain AAA model?	6	L2	CO 2
	4) List the midelines for selecting a PaaS provider	6	L3	CO 2

Roll No.

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur)

## **Department of Computer Science and Engineering**

## B.Tech In-Semester Examination-I, September- 2023

Course Name :	Deep Learning	Course Code: CSE705
Day & Date :	Friday 29/09/2023	Max Marks : 40Marks
Time :	9.15 to 10.45 AM	

### **Instructions:**

i. All questions are compulsory

ii. Figures to the right indicates full marks, Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2- Understanding, L3 – Applying, L4 – Analyzing, L5 – Evaluating, L6 - Creating)

iii. Use of non-programmable calculator is allowed. iv. Assume suitable data if required **Course Outcomes are:** 

CO1: Identify the deep learning algorithms to solve various problems.

CO2: Analyses optimization and regularization techniques of deep learning for the given problem

		Marks	B.L	СО
Q.1	Attempt any two			CO1
a)	State Overfitting, Underfitting and Capacity in ML?	7	L1	
b)	Define Point Estimator, Function Estimator, Bias and Variance in DL?	7	L1	
c)	Explain Stochastic Gradient Decent?	7	L2	
Q.2	Attempt any two			<b>CO2</b>
a)	Draw the Architecture of Feed forward Neural Network?	7	L2	
b)	Tell the Necessity of Cost function ? Explain the different types of Cost functions?	7	L2	
c)	Mention use of Activation function? Classify the Different types of Activation functions in Neural Networks?	7	L2	
Q.3	Attempt any two			<b>CO1</b>
a)	State Challenges motivating deep learning?	6	L1	
b)	Describe the Concept of Back propagation algorithm w.r.t to Neural Network?	6	L3	
c)	Illustrate the Maximum like hood estimation along with conditional log like hood and mean square error?	6	L2	



SWVSM'S

Tatyasaheb Kore Institute of Engineering and Technology, Warananagar (An Autonomous Institute, Affiliated to Shivaji University, Kolhapur) Department of Computer Science and Engineering

## **B.Tech In-Semester Examination-II, October- 2023**

Course Name	:	Deep Learning	Course Code:	CSE705
Day & Date	:	Monday 31/10/2023	Max Marks :	40Marks
Time	:	9.15 to 10.45 AM		

### **Instructions:**

- i. All questions are compulsory
- ii. Figures to the right indicates full marks, Course Outcome (CO) & Bloom's Taxonomy Level (BL) (L1- Remembering, L2- Understanding, L3 Applying, L4 Analyzing, L5 Evaluating, L6 Creating)
- iii. Use of non-programmable calculator is allowed
- iv. Assume suitable data if required

### **Course Outcomes**

CO2 : Analyses optimization and regularization techniques of deep learning for the given problem CO3 : Develop different deep learning models for given tasks Apply

CO4 : To Demonstrate the mathematical, statistical and computational challenges of building neural networks

		Marks	B.L	CO
Q.1	Attempt any two			CO2
a)	Why Regularization is needed? State L1 and L2 Regularization	7	L1	
	in detail?			
b)	Discuss Norm-Penalties as constraint optimization?	7	L2	
c)	Describe Multicast learning w.r.t Regularization	7	L2	
Q.2	Attempt any two			CO4
a)	Demonstrate the working of pooling operation in CNN	7	L3	
b)	Enlist Different data types used in CNN?	7	L1	
c)	Illustrate convolution operation in CNN?	7	L2	
Q.3	Attempt All Questions			CO3
a)	Write briefly variants of CNN Model?	6	L2	
	OR			
	Classify different components of CNN Model	6	L2	
b)	Why semi supervised learning needed in Regularization?	6	L2	CO2
	OR			
	Report Data augmentation w.r.t. to Regularization	6	L2	

