



R22 Regulation

Subject code:4E7HA

# TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

**B.Tech VII Semester Regular Examinations, November 2025**

## CLLOUD COMPUTING (CSE(DS))

Maximum Marks: 60

Date: 24.11.2025

Duration: 3 hours

- Note: 1. This question paper contains two parts A and B.  
2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.  
3. Part B consists of 5 Units. Answer any one full question from each unit.  
4. Each question carries 10 marks and may have a, b, c, d as sub questions.

### Part-A

All the following questions carry equal marks (10X1M=10 Marks)		Marks	CO	BloomTx
1.a)	Define Cloud Computing.	1M	1	1
b)	Write about SISD.	1M	1	2
c)	List out Characteristics of virtualized environments.	1M	2	1
d)	Define SOA	1M	2	1
e)	List out the types of Cloud Services.	1M	3	2
f)	Differentiate Public Cloud and Private Cloud.	1M	3	4
g)	List out the Security Issues in Cloud.	1M	4	2
h)	Define Application Level Security.	1M	4	1
i)	List out the Features of HDFS.	1M	5	2
j)	Define Map Reduce.	1M	5	1

### Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BloomTx
2	a) How Transparency in Programming Environments separates in Cloud Computing? b) Explain The Cloud Architecture with Neat Diagram.	5M 5M	1	2
OR				
3	a) With respect to cloud computing, list and explain the distribution system models. b) List out and Explain Types of Parallel Computing.	6M 4M	1	2
4	Compare the terms Full virtualization and Para virtualization and depict the process of virtualizing CPU, Memory, I/O devices.	10M	2	2
OR				
5	Explain about REST and Systems of Systems.	10M	2	2
6	a) Mention the characteristics of SaaS. b) Explain in detail NIST cloud architecture.	5M 5M	3 3	4 2
OR				

7	Present an architectural design for a hybrid cloud. State the functional requirements you are considering.	10M	3	2
8	Discuss about the virtual machine security.	10M	4	3
	OR			
9	Explain the different level of Cloud Infrastructure security: network, host and application level.	10M	4	2
10	a) Explain on Open Stack and programming support for cloud storage. b) Describe the working of Hadoop.	5M 5M	5	2
	OR			
11	What is Google App Engine? Describe the major building blocks and functional modules of the Google Cloud platform with a diagram.	10M	5	2