

K. J. Somaiya Institute of Technology, Sion, Mumbai-22
(Autonomous College Affiliated to University of Mumbai)

Nov – Dec 2024

(B. Tech) Program: Electronics and Telecommunication _Scheme: II
Regular Examination: LY Semester: VII

Course Code: EXDLC7044 and Course Name: Cloud Computing & Security
Max. Marks: 60

Date of Exam: 23/11/24

Duration: 2.5 Hours

Instructions:

- (1) All questions are compulsory.
- (2) Draw neat diagrams wherever applicable.
- (3) Assume suitable data, if necessary.

Q. No.	Question	Max. Marks	CO	BT level
Q 1	Solve any two questions out of three: (05 marks each)	10		
a)	List the Pros and Cons of cloud computing.		CO1	U
b)	Explain different types of hypervisors with examples?		CO2	U
c)	What is Network as a Service (NaaS), and how does it work?		CO3	U
Q 2	Solve any two questions out of three: (05 marks each)	10		
a)	Explain Architecture of Google File System?		CO4	U
b)	Differentiate between S3 and Amazon Glacier		CO5	U
c)	What are the risks associated with cloud computing?		CO6	U
Q.3	Solve any two questions out of three. (10 marks each)			
a)	How does the KVM architecture operate, and what are its key components and functions? Analyze how it differs from other hypervisors.		CO2	U
b)	Explain Platform as a Service (PaaS) architecture		CO3	U
c)	Explain Elastic Load Balancing (ELB). How it dynamically distributes traffic		CO5	U
Q.4	Solve any two questions out of three. (10 marks each)	20		
a)	How would you apply Identity Management as a Service (IDaaS) to enhance the security of a remote workforce?		CO3	Ap
b)	Explain the conceptual architecture of OpenStack. Describe how you would use Horizon to monitor and manage OpenStack resources, such as virtual machines, networks, and storage volumes, from a centralized interface.		CO4	Ap
c)	How would you configure IAM to allow users access to resources based on their job role, ensuring that permissions are updated as roles change?		CO6	Ap
