

# CBCS SCHEME - Make-Up Exam

USN

BCS601

## Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025

### Cloud Computing

Max. Marks: 100



*Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.  
2. M : Marks , L: Bloom's level , C: Course outcomes.*

Module - 1			M	L	C
Q.1	a.	Discuss the evolution and applications of high performance and high throughput system.	10	L2	CO1
	b.	Explain multithreading technology with respect to five micro architecture in modern CPU processors.	10	L2	CO1
<b>OR</b>					
Q.2	a.	Discuss the fundamental components and working principles of modern multicover processor with a neat diagram.			10
	b.	Compare different virtual machine architecture : Native VM, hosted VM and dual mode VM with physical machine model also discuss VM primitive operations.			10
<b>Module - 2</b>					
Q.3	a.	Define Virtualization. Explain five obstruction levels of virtualization with a neat diagram.			10
	b.	Define Hypervisor. With a neat diagram, explain Xen architecture.			10
<b>OR</b>					
Q.4	a.	Explain in detail Virtualization in multicover processors with a neat diagram.			10
	b.	Define Live Migration. Explain live migration steps and performance effects.			10
<b>Module - 3</b>					
Q.5	a.	Discuss Public, Private and Hybrid clouds. Explain the classification of cloud based on the types of services offered.			10
	b.	With a neat diagram, explain generic cloud architecture.			10
<b>OR</b>					
Q.6	a.	Explain different types of architectural design challenges.			10
	b.	With a neat diagram, explain any two public cloud platforms.			10

## Module - 4

Q.7	a.	Discuss Top Security Concerns and Security risks faced by cloud users.	10	L2	CO4
	b.	Explain different types of cloud data encryption method.	10	L2	CO4

## OR

Q.8	a.	With a neat diagram, explain virtual security services provided by hypervisor.	10	L2	CO4
	b.	With a neat diagram, explain the corresponding security measures taken at each cloud service models.	10	L2	CO4

## Module - 5

Q.9	a.	Summarize different features of cloud and grid platforms.	10	L2	CO5
	b.	With a neat diagram, explain map reduce framework and overall structure of map reduce program.	10	L2	CO5

## OR

Q.10	a.	Design a program using map reduce functions to count number of occurrences of each word in a sentence i) Most-people ignore most poetry ii) Most poetry ignores most people	10	L3	CO5
	b.	With a neat diagram, explain the architecture and data mutation sequence in Google File System (GFS).	10	L2	CO5

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