

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE Regular/Supplementary Winter Examination – 2024 Course: B.Tech Branch : Computer Engineering/Computer Science and Engineering Semester : VII Subject Code & Name: BTCOC702 Cloud Computing Max Marks: 60 Date: 07/02/2025 Duration: 3 Hr.			
Instructions to the Students: 1. Each question carries 12 marks. 2. Question No. 1 will be compulsory and include objective-type questions. 3. Candidates are required to attempt any four questions from Question No. 2 to Question No. 6. 4. The level of question/expected answer as per OBE or the Course Outcome (CO) on which the question is based is mentioned in () in front of the question. 5. Use of non-programmable scientific calculators is allowed. 6. Assume suitable data wherever necessary and mention it clearly.			
		(Level/CO)	Marks
Q. 1	Objective type questions. (Compulsory Question)		12
1	What is the disadvantage of cloud computing? a. It requires constant internet connection. b. It does not support group collaboration. c. It provides limited storage. d. None of these.		1
2	Cloud computing is a distributed computing model. a. True b. False		1
3	Which is/are true regarding cloud computing? a. It does not provide ubiquitous access b. It provides on-demand network access c. Resources can be released with no management effort d. None of these		1
4	_____ is a program on a host system that lets one computer support multiple, identical execution environments. a. Application program b. Virtual Machine Manager c. Hypervisor d. Operating System		1
5	Which is not the task performed by virtualization? a. To share storage b. To share software environment c. To share network d. To share medium		1
6	_____ requires the support of an operating system to provide virtualization services, means they are the programs managed by operating system. a. Type I hypervisor b. Type II hypervisor		1
7	Customers are provided with applications that are accessible anytime and from anywhere, this comes under the category of _____. a. SaaS b. PaaS c. IaaS d. XaaS		1
8	Which is not a virtual machine technology from the below given options? a. KVM b. Xen c. Vmware d. Aneka		1
9	Virtual machines are example of a. SaaS b. PaaS c. IaaS d. None of these		1
10	In terms of the pricing models introduced by Cloud computing, from below which is not the strategy? a. Pay-as-you-go b. Tiered pricing		1

	c. Per-unit Pricing	d. Subscription-based pricing		
11	Cloud Bursting for load balancing between clouds is an example of a. Community cloud b. Public cloud c. Private cloud d. Hybrid cloud			1
12	SaaS is useful in case of applications where extremely fast processing of real time data is needed. a. True b. False			1
Q. 2	Solve the following.			12
A)	How web applications can be designed using cloud environment? Explain with an example.	Analyze Evaluate		6
B)	What are the main cloud service models you can choose from when using a cloud service provider? Explain any two.	Remember understand		6
Q.3	Solve the following.			12
A)	Why are data centers important? What are the standards in data center design? State the types of data center services.	Remember		6
B)	By using cloud computing, how vast amount of computing power is achieved from relatively low-cost PCs and servers? Explain with the help of architecture.	Evaluate Apply		6
Q. 4	Solve Any Two of the following.			12
A)	What is Software-Defined Networking? Explain with its architecture. State its advantages.	Remember Understand		6
B)	Explain the concept of hypervisor in details with their types and example systems. List the benefits of virtualization.	Remember Analyse		6
C)	What is software defined storage? What are some examples of it? How does it work as compared to regular storage?	Remember Understand		6
Q.5	Solve Any Two of the following.			12
A)	Explain the concept of a cloud storage service level agreement (SLA). State the primary types of cloud storage. How do cloud storage providers ensure data durability?	Understand Analyze		6
B)	What are the main types of cloud databases? What does a consumer gain when opting to utilize a virtual machine and set up a database on it?	Remember		6
C)	Describe the concept of MongoDB. What are the benefits of using MongoDB? Also list the advantages of MongoDB.	Understand		6
Q. 6	Solve Any Two of the following.			12
A)	Explain the concept of Cloud object storage with its architecture and examples. How to avoid losing the Metadata from the data?	Remember Analyze		6
B)	What do you know about AWS S3? Explain the architecture of Amazon S3.	Remember Understand		6
C)	What is OpenStack? What are the three main components of OpenStack? State the benefits of using the OpenStack?	Remember Understand		6
	*** End ***			