

MCA Sem.-3 Examination**Cloud Computing****December-2024****Time : 3-00 Hours]****[Max. Marks : 50****Instructions:**

- Write both the Sections in the separate answer book.
- Both Sections having equal weightage.
- Draw Diagrams wherever necessary.
- Make Assumptions wherever necessary.

SECTION – I

Q-1	<p>Explain the following terms in brief:</p> <ol style="list-style-type: none"> Cluster Computing Time Sharing Systems Type-1 Hypervisor Resource Pooling Community Cloud What is multi-tenancy feature in cloud? State the role of CSA Discuss 'abstraction' in cloud computing model Discuss how BASE is different from CAP ? 	[09]
Q-2	<p>Attempt the following : (Any 2)</p> <ol style="list-style-type: none"> Discuss any 4 advantages of cloud computing in detail. Distinguish between private cloud and public cloud – give 4 differences <p style="text-align: center;">OR</p>	[08]
Q-2	<p>Attempt the following : (Any 2)</p> <ol style="list-style-type: none"> Discuss various actors and their roles with reference to NIST cloud computing architecture Explain any 4 services of AWS in detail and discuss how you will use them in a web application development project. 	
Q-3	<p>Attempt the following :</p> <ol style="list-style-type: none"> Discuss four security related criteria with reference to Jericho Forum Differentiate between Full-Virtualization and Para-Virtualization – give 4 differences <p style="text-align: center;">OR</p>	[08]
Q-3	<p>Attempt the following:</p> <ol style="list-style-type: none"> Discuss any 4 security threats related to Virtualization Discuss any 4 advantages of Virtualization. 	

SECTION – II

Q-4	<p>Answer the followings:</p> <ol style="list-style-type: none"> What is serverless computing? Give a real-time example of Platform As A Service (PaaS) What is VM Escape? How is proactive scaling different from reactive scaling approach? How is Privacy different from Security? Give any one example of compliance with reference to cloud What is the use of OVF format ? What is the role of application delivery controller (ADC) ? What is the significance of 'P' in CAP theorem? 	[09]
Q-5	<p>Attempt the following:</p> <ol style="list-style-type: none"> Differentiate between static and dynamic provisioning – give 4 differences Give examples where the following scaling techniques will be applied: (a) cyclic scaling (b) event based scaling (c) manual scaling (d) reactive scaling <p style="text-align: center;">OR</p>	[08]
Q-5	<p>Attempt the following:</p> <ol style="list-style-type: none"> Differentiate between vertical scaling and horizontal scaling – give 4 differences Give any 1 example of portability and 1 example of interoperability with reference to public cloud environment 	
Q-6	<p>Attempt the following:</p> <ol style="list-style-type: none"> Distinguish between internal audit and external audit – give 4 differences What is virtual appliance? How can it be helpful? Give atleast 2 advantages of virtual appliance. <p style="text-align: center;">OR</p>	[08]
Q-6	<p>Attempt the following:</p> <ol style="list-style-type: none"> Discuss any 4 cloud security design principles in detail Discuss the model of Content Delivery Network (CDN) in detail. 	