MEDICAPS
UNIVERSITY

Faculty of Science / Engineering
End Semester Examination May 2025
CA3EL16 Cloud Computing

Programme	:	BCA / BCA-MCA (Integrated)	Branch/Specialisation	:	-
Duration	:	3 hours	Maximum Marks	:	60

Note: *All questions are compulsory. Internal choices, if any, are indicated. Assume suitable data if necessary. Notations and symbols have their usual meaning.*

		Marks	CO	BL
Section 1 (Answer all question(s))				

Q1. Which one of the following can be considered as the example of the front-end? **1 1 1**
- ○ Google Compute Engine
- ◉ Web Browser
- ○ Cisco Metapod
- ○ Window Azure

Q2. _____ is the essential concept related to cloud. **1 1 1**
- ○ Modulation
- ◉ Abstraction
- ○ Reliability
- ○ None of the above

Q3. The Force.com and windows Azure are examples of which of the following? **1 2 1**
- ○ IaaS
- ○ SaaS
- ◉ PaaS
- ○ DaaS

Q4. Which of the following is a key benefit of Platform as a Service (PaaS)? **1 2 1**
- ○ Increased hardware flexibility
- ○ Full hardware control
- ○ Manual scaling
- ◉ Faster development

Q5. Which of the following is a step of deployment phase? **1 3 1**
- ○ Transformation Plan . Development
- ○ IT architecture development
- ○ Business Architecture . Development
- ◉ Selecting cloud computing provider

Q6. Which AWS service is ideal for deploying applications in a private cloud environment? **1 3 1**
- ◉ AWS VPC
- ○ AWS EC2
- ○ AWS Lambda
- ○ AWS S3

Q7. In virtualization, what is the function of a hypervisor? **1 4 1**
- ○ Creates storage clusters
- ○ Optimizes network bandwidth
- ◉ Manages the virtual machine and hardware interaction
- ○ Enhances security

Q8. It is an array of servers that are managed by a virtual storage system. **1 4 1**
- ○ Desktop virtualization
- ◉ Storage virtualization
- ○ Application virtualization
- ○ Network virtualization

Q9. What is a common security concern related to multi-tenancy in cloud computing? **1 5 1**
- ◉ Data segregation
- ○ Lack of internet connectivity
- ○ Limited scalability
- ○ Insufficient processing power

Q10. Which cloud security component controls who can access specific cloud resources and what actions they can perform? **1 5 1**

    ○ Network security   ○ Multi-Factor Authentication

    ◉ Identity and Access Management (IAM)   ○ Data encryption

Section 2 (Answer any 2 question(s))

<div align="right">

Marks CO BL

</div>

Q11. Define cloud computing. Explain its applications in detail. **5 1 2**

Rubric	Marks
Define Cloud Computing	2
Explain its applications in detail	3

Q12. Explain cloud computing architecture with proper diagram. **5 1 2**

Rubric	Marks
Explain Cloud Computing Architecture	3
Cloud Computing Architecture diagram	2

Q13. What is cloud computing deployment models with examples? **5 1 2**

Rubric	Marks
What is cloud computing deployment models	3
deployment models examples	2

Section 3 (Answer any 2 question(s))

<div align="right">

Marks CO BL

</div>

Q14. Explain communication as a service and database as a service with proper diagram. **5 2 2**

Rubric	Marks
Explain Communication as a Service	2
Explain Database as a Service	2
Diagram of Communication as a Service and Database as a Service	1

Q15. What are IaaS, PaaS, and SaaS? Explain with examples and diagram. **5 2 2**

Rubric	Marks
What is IaaS PaaS and SaaS	3
IaaS PaaS and SaaS example and diagram?	2

Q16. What is cloud service provider? Which are the major cloud service providers? **5 2 2**

Rubric	Marks
What is cloud service provider	2
atleast 3 cloud service providers (1 marks for each)	3

Section 4 (Answer any 2 question(s))

<div align="right">

Marks CO BL

</div>

Q17. What are the phases to migrate the entire business to cloud?   5   3   2

Rubric	Marks
For explaining Phase 1	2
For explaining Phase 2 and 3 (1.5 marks each)	3

Q18. What is Amazon EC2 and Amazon S3 with its features?   5   3   2

Rubric	Marks
What is Amazon EC2	1.5
What is Amazon S3	1.5
Features of Amazon EC2 and Amazon S3	2

Q19. Explain Google App Engine in cloud computing with diagram.   5   3   2

Rubric	Marks
Explain Google App Engine in detail	3
Diagram of Google App Engine	2

Section 5 (Answer any 2 question(s))   Marks CO BL

Q20. Explain virtualization and its types in cloud computing.   5   4   2

Rubric	Marks
Explain Virtualization	1
Explain Types of Virtualization in cloud computing?	4

Q21. Explain different implementation levels of virtualization in cloud computing.   5   4   2

Rubric	Marks
Explain Implementation Levels of Virtualization (1 marks for each level)	5

Q22. Explain virtualization structure in cloud computing with diagram.   5   4   2

Rubric	Marks
Explain Virtualization Structure	3
Virtualization Structure diagram	2

Section 6 (Answer any 2 question(s))   Marks CO BL

Q23. How do cloud security threats differ from traditional security threats?   5   5   2

Rubric	Marks
Cloud Security Threats Differ from Traditional Security Threats? (1 marks for each difference)	5

Q24. Explain the concept of Identity and Access Management (IAM) in cloud security.   5   5   2

Rubric	Marks
Explain Identity and Access Management (IAM)	2
Concept of Identity and Access Management (IAM) in cloud security	3

Q25. Explain cloud computing security architecture with diagram.   5   5   2

Rubric	Marks
Explain cloud computing security architecture	3
security architecture diagram?	2

******