

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. (IT) DEGREE PROGRAMME – 2024/2025
DEPARTMENT OF COMPUTER SCIENCE
COU5301 – CLOUD COMPUTING
FINAL EXAMINATION
DURATION: **TWO HOURS ONLY (2 HOURS)**



Date: 12.11.2025

Time: 01.30 p.m. – 03.30 p.m.

ANSWER FOUR (4) QUESTIONS ONLY

(1)

- i. Describe the concept of "Cloud Computing".
- ii. Write down two (2) reasons why organizations move from traditional computing to cloud computing.
- iii. "Cloud resources can be rapidly and elastically provisioned." Is this statement true or false? Justify your answer.
- iv. Who are the different actors in the context of cloud computing? Briefly explain each actor.

(25 Marks)

(2)

- i. Write down four (4) different types of cloud computing.
- ii. Write down two (2) differences between Application Service Provider (ASP) and Software as a Service (SaaS).
- iii. What is the multi-tenant integration approach, and what is the role of Cloud Access Security Brokers (CASBs) in it?
- iv. Explain three (3) use cases of SaaS application development.

(25 Marks)

(3)

- i. Write down four (4) advantages of Platform as a Service (PaaS).
- ii. Describe the most important two (2) facts when choosing a PaaS provider?
- iii. Write down three (3) cloud database management choices.
- iv. List three (3) types of NoSQL databases and briefly explain three (3) advantages of them over traditional on-premises databases.

(25 Marks)

(4)

- i. What are Virtual Machines (VMs) in Infrastructure as a Service (IaaS)?
- ii. List down two (2) disadvantages of IaaS.
- iii. Briefly explain three (3) benefits of cloud migration.
- iv. List three (3) cloud migration tools and explain their functionalities.

(25 Marks)

(5)

- i. Define the concept of cyber security?
- ii. Cloud computing components are secured from two (2) main viewpoints. List those and briefly explain them.
- iii. List down three (3) common elements of Service Level Agreement (SLA) and briefly explain them.
- iv. Briefly explain why following cloud data protection is important for an organization to set up for success.
 - a) Develop a backup and recovery strategy
 - b) Encrypt all data
 - c) Implement multi-factor authentication

(25 Marks)

(6)

- i. List down (4) benefits of disaster recovery.
- ii. Disaster recovery plan addresses three (3) different elements for recovery. List those and briefly explain them.
- iii. Describe three (3) limitations of mobile computing.
- iv. Explain three (3) advantages obtained by the integration of cloud computing in mobile computing.

(25 Marks)

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