

(2 Hours)

[Total Marks: 60]

- N. B.: (1) All questions are compulsory.
(2) Make suitable assumptions wherever necessary and state the assumptions made.
(3) Answers to the same question must be written together.
(4) Numbers to the right indicate marks.
(5) Draw neat labelled diagrams wherever necessary.
(6) Use of Non-programmable calculators is allowed

- Q. 1 Attempt the two of the following.** **12 marks**
a. What is Server consolidation? Explain the process of live migration.
b. Explain the Security rings and privilege modes.
c. What is cloud computing's innovative characteristic?
d. What is virtualization? And state its importance in Cloud Computing.
- Q. 2 Attempt the two of the following.** **12 marks**
a. What do you mean by Cloud? Explain its Characteristics and Benefits in detail.
b. Explain the Amazon elastic block store and Amazon elastic cache.
c. Describe the different types of threat agents and cloud security threats?
d. List Some Challenges in cloud computing.
- Q. 3 Attempt the two of the following.** **12 marks**
a. Explain Cloud-Based Security Groups in details.
b. What is Identity and Access Management (IAM)? Explain its components.
c. How does a pay-per-use monitor help business manage their cloud costs?
d. What is the role of an audit monitor in a cloud environment, and how does it enhance security?
- Q. 4 Attempt the two of the following.** **12 marks**
a. Explain zero downtime architecture.
b. Explain the step by step inner working of rapid provisioning engine.
c. Explain using suitable diagram, Bare-Metal Provisioning Architecture.
d. Write a short note on workload distribution architecture.
- Q. 5 Attempt the two of the following.** **12 marks**
a. Explain SLA Guidelines for Cloud Computing.
b. Write short note on
 a) Service Availability Metrics.
 b) Service Reliability Metrics.
c. Explain Server usage cost metrics for calculating costs associated with cloud-based IT resources.
d. How SaaS Environments can be optimized? Explain with example.
