



BRAINWARE UNIVERSITY

Term End Examination 2022
Programme – B.Tech.(CSE)-2018/B.Tech.(CSE)-2019
Course Name – Cloud Security
Course Code - PEC-701B
(Semester VII)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :
- (i) Write the option in which an architecture in which no special machines manage network resources is known as
 - a) Space-Based
 - b) Tightly-Coupled
 - c) Loosely-Coupled
 - d) Peer-to-Peer
 - (ii) Write the option in which transparency that allows movement of resources and clients within a system is called
 - a) Concurrency Transparency
 - b) Performance Transparency
 - c) Replication Transparency
 - d) Mobility Transparency
 - (iii) Write the option in which all cloud computing applications suffer from the inherent _____ that is intrinsic in their WAN connectivity.
 - a) Propagation
 - b) Latency
 - c) Noise
 - d) None of these
 - (iv) Select from the following option in Which billing model is based on the packaging of computing resources (i.e. computation and storage) and the amount of those resources used?
 - a) Metered
 - b) Subscription
 - c) Recurring
 - d) Per user based
 - (v) Choose the option in Which of the following is the operational domain of CSA?
 - a) Scalability
 - b) Portability and interoperability
 - c) Flexibility
 - d) None of these
 - (vi) Select the option in which _____ enables batch processing, which greatly speeds up high-processing applications.
 - a) Scalability
 - b) Elasticity
 - c) Reliability
 - d) Utility
 - (vii) Select the option in which an operating system running on a Type _____ VM is full virtualization.
 - a) 1
 - b) 2
 - c) 3
 - d) All of these

- (viii) Select the option in which of the following is the most widely used technique for abstraction?
- a) Load balancing
c) Load scaling
- b) Load scheduling
d) All of these
- (ix) Write the option in which a company needs to provide IT services to a worldwide customer base utilizing a diverse set of devices. Which attribute of cloud computing can help the company deliver such services?
- a) Pervasiveness
c) Vertical scaling of application servers
- b) Flexible pricing
d) Horizontal scaling of application servers
- (x) Select from the following option in which of the following is Type 2 VM?
- a) VirtualLogix VLX
c) Xen
- b) VMware ESX
d) LynxSecure
- (xi) Select the option in which of the following is also referred to edge computing?
- a) CloudWatch
c) CloudSpot
- b) CloudFront
d) CloudWave
- (xii) Choose the option in which applications that work with cloud computing that have low margins and usually low risk are _____
- a) High touch
c) Moderate touch
- b) Low touch
d) None of these
- (xiii) Select from the following option, What is the definition of provisioning as an automated process related to cloud computing?
- a) It moves data from one cloud to another
c) It adds security constraints to a cloud environment
- b) It provides server consolidation capability
d) It handles computing resource management processes
- (xiv) Select What is a common design element often found in cloud architectures?
- a) Single tiered
c) Synchronous web services
- b) Terminal emulators
d) Asynchronous web services
- (xv) Write the option in which a dynamic connection that grows into dynamic networks of networks, is called
- a) Cyber Cycle
c) Cyber-Physical System
- b) Internet of Things
d) Multithreading

Group-B

(Short Answer Type Questions)

3 x 5=15

- Describe briefly about Reservations with VM. Illustrate Amazon elastic Compute Cloud(EC2). (3)
- Evaluate Data Migration and which type of best practices should be used to protect data during a migration? (3)
- Write what do you mean by VM migration ? Explain (3)
- What is virtual desktop infrastructure? Explain (3)
- Show the design of amazon VPC. (3)

OR

Express the role of security groups and NACL in amazon VPC. (3)

Group-C

(Long Answer Type Questions)

5 x 6=30

- Enumerate the functions of VPN. (5)
- Explain the CIA model of cloud security. (5)
- How authentication is different from authorization in a cloud computing environment ? (5)
- Classify the functionalities of Amazon S3 (5)
- Devise the different levels of infrastructure security. (5)
- Access DoS attack in cloud computing ? (5)

OR

Assess the role of Hypervisor in cloud computing and their types.

(5)
