

B.E./B.TECH. Degree Examination, December 2020

Seventh Semester

IT16704 Cloud Computing

(Regulation 2016)

Time: Three hours

Maximum : 80 Marks

Answer **ALL** questions

PART A - (8 X 2 = 16 marks)

1. The interconnected standalone computers are working cooperatively as a single integrated computing resource is called as _____
(a) Data Cluster (b) Computing Cluster (c) Storage Cluster (d) Distributed Cluster
2. _____ helps the business to create an integrated, virtualized solution that aligns with the environment.
(a) Storage Optimization and Integration Services (b) Virtual storage pool
(c) Value Proposition (d) Storage Drivers
3. The data collected by the _____ monitor is processed by a billing management system that calculates the payment fees.
(a) SLA Monitor (b) Pay-per-use monitor (c) Cloud Usage Monitor (d) Audit Monitor
4. Which of the following service provider provides the least amount of built in security?
(a) SaaS (b) PaaS (c) IaaS (d) All of the mentioned
5. List the characteristics of cloud computing & how effective are On-Demand functionality in Cloud computing?
6. Justify whether hardware assisted supports CPU virtualization?
7. List the characteristics of HDFS.
8. What are the emerging cloud software environments?

PART B - (4 X 16 = 64 marks)

09. (a) Discuss the pros & cons of cloud computing. How will you deploy the cloud under various models? **(16)**

(OR)

- (b) Explain the NIST cloud computing architecture in detail and Compare parallel and distributed computing. **(16)**

10. (a) Enlist and Explain some of the pitfalls that come with virtualization. Investigate the importance of CPU, Memory and I/O device virtualization. **(16)**

(OR)

- (b) Examine the different implementation levels of virtualization. Also, state **(16)**

the role of data center automation in virtualization.

11. (a) Investigate the following cloud management mechanisms. **(16)**
i) Remote Administration System, ii) Resource Management System,
iii) SLA Management System and iv) Billing Management System.

(OR)

- (b) Interpret the functionalities of load balancer, SLA monitor, Audit monitor **(16)**
and Failover system.

12. (a) (i) Given a text file containing multiple words, count the number of **(8)**
occurrences of each word in the text file using MapReduce Program.
Also, state why HDFS is not a good fit today?

- (ii) List out the aspects of data security and analyze the data security **(8)**
scenarios.

(OR)

- (b) (i) Illustrate about the Eucalyptus and Nimbus cloud software **(8)**
environments.

- (ii) Demonstrate with an example of Microsoft Hyper-V high level **(8)**
architecture.