

Cloud Computing (315325)

MSBTE Diploma · K-Scheme · Model Question Paper — Set B

Time: 3 Hours**Max. Marks: 70****Instructions:**

1. All questions are compulsory.
2. Answer each next main question on a new page.
3. Illustrate your answers with neat sketches wherever necessary.
4. Figures to the right indicate full marks.
5. Assume suitable data, if necessary.
6. Mobile phone, pager and any other electronic communication devices are not permissible in the examination hall.

Q.1 Attempt any FIVE of the following:**10**

- a) Define community cloud. Give one example.
- b) List any four characteristics of a virtualized environment.
- c) Define VM consolidation.
- d) List the five phases of SLA management.
- e) List any four legal risks of cloud computing.
- f) State any four features of ZigBee technology.
- g) Define the terms: i) Rapid elasticity ii) Measured service.

Q.2 Attempt any THREE of the following:**12**

- a) A software team wants to develop and deploy a web application without buying or managing servers and operating systems. Which cloud service model suits them? Explain it with two advantages and two disadvantages.
- b) Differentiate between live migration and cold migration of virtual machines. (Any four points)
- c) Explain heartbeat, replication and balancing in Hadoop Distributed File System (HDFS).
- d) Explain content-level security with its pros and cons. List any four features of Security-as-a-Service.

Q.3 Attempt any THREE of the following:**12**

- a) Explain the VMware full virtualization reference model with a neat diagram.
- b) Differentiate between infrastructure SLA and application SLA. Which SLA is more useful for an e-commerce company using a SaaS shopping platform? Justify.

- c) Explain RFID as an enabling technology for the Internet of Things with a neat diagram.
- d) Explain the role of trust management in cloud computing.

Q.4 Attempt any THREE of the following:

12

- a) Explain the life cycle of a virtual machine with a neat diagram.
- b) Explain the architecture of federated cloud computing with a neat diagram.
- c) Explain the importance of access control in cloud computing. State any two access control models.
- d) Explain any four cost benefits of cloud computing.
- e) Explain CRM and ERP as business applications of cloud computing.

Q.5 Attempt any TWO of the following:

12

- a) Explain server, storage, network, desktop and application virtualization.
- b) Explain the five phases of SLA management in detail.
- c) Explain policy and organizational, technical and legal risks of cloud computing.

Q.6 Attempt any TWO of the following:

12

- a) Explain IaaS, PaaS and SaaS with a neat diagram and compare them. (Any six points)
- b) Explain how cloud trends support ubiquitous computing. Illustrate with a suitable example.
- c) Explain the benefits of Google App Engine for developers. List its main features.

Note: This is a **model question paper prepared by Ananda Technologies** only for practice and exam preparation, based on the pattern of previous MSBTE question papers and the K-scheme syllabus. It is **not an official MSBTE paper**, and it does **not** mean that these questions will come in the exam. Answers follow standard textbook points; marks shown are indicative. Free for students — anandatechnologies.in