USN

BIS613D

Sixth Semester B.E./B.Tech. Degree Examination, June/July 2025 Cloud Computing and Security

Time: 3 hrs.

Max. Marks: 100

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M: Marks, L: Bloom's level, C: Course outcomes.

| | | Module – 1 | M | L | С |
|-----|----|---|-----|----|-----|
| Q.1 | a. | Describe the vision introduced by cloud computing? | 06 | L2 | COI |
| | b. | Provide brief characteristics of distributed system with examples? | 06 | L3 | CO |
| | c. | What is the major revoluation introduced by web 2.0? | 08 | L2 | CO |
| | | OR | | | |
| Q.2 | a. | Describe the main characteristic of service orientation of cloud computing with examples. | 06 | L3 | CO1 |
| | b. | What is the major distributed computing technology that led to cloud computing. | 06 | L2 | CO1 |
| | c. | Briefly summarize the challenges still open in cloud computing. | 08 | L1 | CO |
| | | Module – 2 | | | |
| Q.3 | a. | What is Xen? Discuss its elements for virtualization. | 06 | L2 | CO2 |
| | b. | Discuss the reference module of full virtualization. | 06 | L3 | CO |
| | c. | List and discuss different types of virtualization. | 08 | L2 | CO |
| | | OR | | | L |
| Q.4 | a. | How is cloud development different from traditional software development. | 06 | L2 | CO |
| | b. | Discuss the architecture of Hyper – V. Discuss its use in cloud computing. | 06 | L2 | CO |
| | c. | Discuss classification on taxonomy of visualization of different levels? | 08 | L3 | CO |
| | | Module – 3 | | | |
| Q.5 | a. | Explain the three primary cloud service models; IaaS PaaS, and SaaS with examples. | 06 | L2 | CO |
| | b. | Differentiate between Public, Private and hybrid cloud with advantages and limitation. | 06 | L3 | CO. |
| | c. | What is a warehouse – scale data center? How does it differ from modular data centers. | 0.8 | L2 | CO |
| | | OR | | | |
| Q.6 | a. | Compare the services and target applications of GAE, AWS and Microsoft Azure. | 06 | L3 | CO |
| | b. | Describe the fat-free topology and explain its use in data center network architecture. | 06 | L2 | CO. |
| | c. | Explain the key requirements for an efficient cloud data center interconnection network. | 08 | L2 | CO |
| | | 1 of 2 | | | |

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| | | Module – 4 | | | |
| Q.7 | a. | What is a trusted Hypervisor? Explain the mobile devices face a range of security challenges? | 06 | L2 | CO4 |
| | b. | Discuss the Security Risks posed by shared images and management os? | 06 | L2 | CO4 |
| | c. | Describe the Hidden Risk in the cloud computing. | 08 | L3 | CO4 |
| | | OR | | | |
| Q.8 | a. | Explain the best Top 5 Cloud Security Best practices. | 06 | L2 | CO4 |
| | b. | What are the most important advantages of cloud technology for social network. | 06 | L2 | CO4 |
| | c. | Describe the key features of Google? | 08 | L2 | CO4 |
| | | Module – 5 | 1 | L | 1 |
| Q.9 | a. | What are the benefits and challenges of using server less computing in the cloud? | 06 | L2 | CO5 |
| | b. | How does grid computing differ from cloud computing. | 06 | L2 | CO5 |
| | c. | What are the key features of cloud computing platforms. | 08 | L2 | CO5 |
| | | OR | | | |
| Q.10 | a. | How do multi cloud and hybrid cloud strategies differ. | 06 | L2 | CO5 |
| | b. | What is infrastructure as code (IaC) and how if it used in the cloud. | 06 | L2 | CO5 |
| | c. | What are emerging cloud environments. | 08 | L2 | CO5 |

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