

Roll No:

Hi-Tech Institute of Engineering & Technology, Ghaziabad.

DEPARTMENT OF MCA

(SEM-I) ODD EXAMINATION 2023-24

Subject Code: KCA -014

Subject Name: CLOUD COMPUTING

Time: 3: 00 Hours

Total Marks: 100

Note: 1. Attempt all Sections.

SECTION-A

1. Attempt all question in brief.

2x 10 = 20

| Q.N O | Question | Marks | CO |
|----------|-------------------------------------------------------------|-------|----|
| a. | Define threat Agents? Explain their role in cloud security. | 2 | 1 |
| b. | What are security services in the cloud? | 2 | 1 |
| c. | What is encryption? Define the types of encryption. | 2 | 1 |
| d. | What is utility computing? | 2 | 1 |
| e. | What is IaaS, PaaS, and SaaS? | 2 | 3 |
| F | What is VM network routing? | 2 | 2 |
| g. | Give some examples of Web 2.0 applications. | 2 | 3 |
| h. | What are IaaS, PaaS and SaaS ? | 2 | 4 |
| i. | What are security services in the cloud? | 2 | 5 |
| j. | What are modules of Hadoop? | 2 | 3 |

SECTION-B

2. Attempt any four of the following:

10x3 =30

| Q.N o | Question | Marks | CO |
|----------|------------------------------------------------------------------------------------------------------|-------|----|
| a. | What is virtual desktop infrastructure? Explain with diagram. | 10 | 1 |
| b. | What is hypervisor ? explain in detail with necessary illustrations. | 10 | 1 |
| c. | Explain virtual LAN (VLAN) AND virtual SAN(VSAN) in cloud computing. | 10 | 3 |
| d. | Explain the cloud computing security architecture using suitable block diagram. | 10 | 4 |
| e | What do you understand by service oriented Architecture (SOA) ? how does it support cloud computing? | 10 | 5 |

SECTION-C

3. Attempt any one part of the following:

10*1 = 10

| Q.No | Question | Marks | CO |
|------|------------------------------------------------------------------------|-------|----|
| a. | Explain the major cloud features of Google applications engine | 10 | 1 |
| b. | What do you mean by third party cloud services? Give suitable examples | 10 | 3 |

4. Attempt any one part of the following:

10*1 = 10

| Q.No | Question | Marks | CO |
|-------------|-------------------------------------------------------------------------------------------------------|--------------|-----------|
| a. | Give a suitable definition of cloud federation stack and explain it in detail. | 10 | 2 |
| b. | Write short notes on any two of the followings: i. HADOOP ii. Microsoft Azure | 10 | 3 |

5. Attempt any one part of the following:

10*1 = 10

| Q.No | Question | Marks | CO |
|-------------|------------------------------------------------------------------------------|--------------|-----------|
| a. | Discuss about the role of DMTF in reference to cloud security. | 10 | 5 |
| b. | Determine the concept of groupware in clouds also discuss its pros and cons. | 10 | 3 |

6. Attempt any one part of the following:

10*1 = 10

| Q.No | Question | Marks | CO |
|-------------|----------------------------------------------------------------------------|--------------|-----------|
| a. | Draw the architecture of Nimbus and explain its components | 10 | 5 |
| b. | Explain several property and characteristics exhibited by cloud computing. | 10 | 3 |

7. Attempt any one part of the following:

10*1 = 10

| Q.No | Question | Marks | CO |
|-------------|-----------------------------------------------------------|--------------|-----------|
| a. | List five public cloud offerings of PaaS. explain briefly | 10 | 3 |
| b. | Explain in detail hypervisor. | 10 | 2 |