22MCA332

## Third Semester MCA Degree Examination, Dec.2024/Jan.2025 Cloud Computing

Time: 3 hrs.

Max. Marks: 100

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  | C               |
|------|---|--|-----|----|-----------------|
| Q.1  | a.                                      | What is the innovative aspect of cloud computing?                          | 10  | L2 | COI             |
|      | b.                                      | Write short notes on:  | 10  | L2 | COI             |
|      |   | (i) Web 2.0 Applications   |     |    | - 0             |
|      |   | (ii) Key features of service orientation                                   |     |    |                 |
|      |   | OR   |     |    |                 |
| Q.2  | a.                                      | Write about the primary distributed computing technologies in cloud        | 10  | L2 | COI             |
|      |   | computing.   |     | 1  |                 |
|      | b.                                      | What is utility computing? Explain in detail.                              | 05  | L1 | COI             |
|      | c.                                      | Explain about the virtualization and its key aspect.                       | 05  | L2 | COI             |
|      |   | Module – 2   |     |    |                 |
| Q.3  | a.                                      | What is parallel and distributed computing and distinction between them?   | 10  | L2 | CO2             |
| 20   | b.                                      | Write detail notes on:   | 10  | L2 | CO2             |
|      |   | (i) The major categories of parallel computing system                      |     |    |                 |
|      |   | (ii) What is service-oriented computing?                                   |     |    |                 |
|      |   | OR   |     |    |                 |
| Q.4  | a.                                      | Explain about the parallel processing and its appealing computing          | 10  | L2 | CO2             |
|      |   | alternatives.  |     |    |                 |
|      | b.                                      | Discuss bout the technologies that enable service computing.               | 10  | L2 | CO2             |
|      |   | Module – 3   |     |    |                 |
| Q.5  | a.                                      | What are the characteristics of virtual environments?                      | 10  | L2 | CO              |
|      | b.                                      | Discuss about the classification of taxonomy of virtualization at various  | 10  | L2 | CO2             |
|      |   | levels.  |     |    |                 |
| 8    |   | OR   |     |    |                 |
| Q.6  | a.                                      | Discuss about the Machine Reference Model for execution in virtualization. | 05  | L2 | CO2             |
|      | b.                                      | What is Xen? Discuss the elements of virtualization.                       | 05  | L2 | CO2             |
|      | c.                                      | Discuss Hyper-V's architecture. Illustrate its application in cloud        | 10  | L2 | CO2             |
|      |   | computing.   |     |    |                 |
|      |   | Module → 4   |     |    |                 |
| Q.7  | a.                                      | What is "XaaS" abbreviation stand for? Explain in detail.                  | 10  | L2 | CO              |
|      | b.                                      | Explain briefly about cloud reference model and essential components.      | 10  | L2 | CO              |
|      |   | OR   |     |    |                 |
| Q.8  | a.                                      | Explain about the different forms of cloud and its classification.         | 10  | L2 | CO3             |
|      | b.                                      | Discuss about the challenges of cloud computing. List out the application  | 10  | L2 | CO3             |
|      |   | development concept.   | A   |    |                 |
|      |   | Module - 5   | 37  |    |                 |
| Q.9  | a.                                      | What is AWS? What are types of services does it provide?                   | 10  | L3 | CO              |
|      | b.                                      | Discuss the storage services provided by windows AZURE in detail.          | 10  | L3 | CO              |
|      |   | OR   |     |    |                 |
| Q.10 | a.                                      | Describe how cloud computing technologies can be used to facilitate        | 10  | L3 | CO              |
|      |   | remote ECG monitoring.   | 191 |    |                 |
|      | b.                                      | What are the most significant benefits of cloud technologies for social    | 10  | L3 | CO <sub>4</sub> |
|      |   | networking applications?   |     |    |                 |
|      |   | ****   |     |    |                 |