Seat No. : 21d

## **SK-135**

September-2020

B.C.A., Sem.-VI

**SEC-302: Cloud Computing** 

| Time: 2 Hours  Instructions: (1) All Questions in Section I carry equal marks.  (2) Attempt any TWO questions in Section I.  (3) Question 5 in Section II is COMPULSORY. |     |             |                                                                                                                                  | Marks: 50 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------|----------------------------------------------------------------------------------------------------------------------------------|-----------|--|
|                                                                                                                                                                          |     |             |                                                                                                                                  |           |  |
|                                                                                                                                                                          |     |             | Section – I                                                                                                                      |           |  |
| 1.                                                                                                                                                                       | (A) | (i)<br>(ii) | Explain various characteristics of cloud computing.  What is Cloud Computing Reference Model? Draw and explain.                  | 5<br>5    |  |
|                                                                                                                                                                          | (B) | (i)<br>(ii) | Explain any one cloud computing technology in detail.  What are the challenges of cloud computing?                               | 5<br>5    |  |
| 2.                                                                                                                                                                       | (A) | (i)<br>(ii) | Explain MIMD architecture of parallel computing in detail.  Explain with diagram the role of web services in service computing.  | 5<br>5    |  |
|                                                                                                                                                                          | (B) | (i)<br>(ii) | Define SOA and explain its characteristics.  Explain System Architecture Style in detail.                                        | 5<br>5    |  |
| 3.                                                                                                                                                                       | (A) | (i)         | Draw and explain the machine reference model.                                                                                    | 5         |  |
|                                                                                                                                                                          | (B) | (ii)<br>(i) | What are the characteristics of virtualized environment?  Explain the benefits and threats of virtualization in cloud computing. | 5         |  |
|                                                                                                                                                                          | (4) | (ii)        | Draw and explain the desktop model of full virtualization.  What are the fundamental components of cloud reference model?        | 5         |  |
| 4.                                                                                                                                                                       | (A) | (i)<br>(ii) | Explain the advantages and disadvantages of private cloud.                                                                       | 5         |  |
|                                                                                                                                                                          | (B) | (i)<br>(ii) | Explain the main characteristics of PaaS solution.  What is heterogeneous cloud? Explain in detail.                              | 5         |  |
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## Section - II

 $(5 \times 2 =$ MCQs Any Five: CSPs is termed as \_\_\_\_\_. (B) Cloud Service Producers (i) (A) Cloud Service Providers (D) Cloud System Producers (C) Cloud System Providers cloud network is available within an organization. (ii) Public (B) (A) Private System (D) (C) Hybrid (iii) X in XaaS stands for \_\_\_\_\_. Everything (B) (A) Extra (D) Expert (C) Express machines. (iv) Uniprocessors are used in \_\_\_\_ CISD (B) (A) SISD (D) CSID (C) S1CD is the characteristic of a service. (v) (A) Boundaries are explicit (B) Services are autonomous. (C) Services share schema and contracts. (D) All of the above (vi) Job distribution approach is used in \_\_\_\_ model. worker (B) (A) farmer Distributor (C) farmer and worker (D) (vii) The least privileged level for security is (B) Ring 1 (A) Ring 0 (D) Ring 3 (C) Ring 2 (viii) Virtualization can be of \_\_\_\_\_ type. (B) network (A) storage (D) All of the above (C) desktop (ix) \_\_\_\_ pricing strategy is adopted by the service providers for pricing models. (B) per-unit (A) tiered (C) subscription-based (D) All of the above Users of \_\_\_\_ cloud shares same concerns or needs. (A) public (B) private (C) hybrid (D) community

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