

02-MAY-2023

Reg. No.

Question Paper Code

11829

B.E./B.Tech. - DEGREE EXAMINATIONS, APRIL/MAY 2023

Seventh Semester

Computer Science and Engineering

CS8791 - CLOUD COMPUTING

(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

PART - A (10 × 2 = 20 Marks)

Answer ALL Questions

- | | <i>Marks,
K-Level, CO</i> |
|--|-------------------------------|
| 1. State the deployment models of cloud computing. | 2,K1,CO1 |
| 2. How is On Demand provisioning of resources applied in cloud computing? | 2,K2,CO1 |
| 3. Discuss the purpose of Publish-Subscribe Model. | 2,K2,CO2 |
| 4. "Although Virtualization is widely Accepted today, it does have its limits".
Comment on the statement. | 2,K2,CO2 |
| 5. Define short notes on Community cloud. | 2,K1,CO3 |
| 6. Describe the role of cloud auditor in cloud. | 2,K2,CO3 |
| 7. State the different Resource Provisioning Methods. | 2,K1,CO4 |
| 8. Identify the phases of Sec SDLC. | 2,K2,CO4 |
| 9. "HDFS is fault tolerant. Is it true? Justify your answer. | 2,K2,CO5 |
| 10. Give some of the Applications of GAE. | 2,K2,CO5 |

PART - B (5 × 13 = 65 Marks)

Answer ALL Questions

11. a) (i) Summarize in detail about the degrees of parallelism. 6,K2,CO1
(ii) Discuss the application of high performance and high throughput system. 7,K2,CO1

OR

- b) Explain in detail about Elasticity in Cloud and On-demand Provisioning. 13,K2,CO1

12. a) Explore what you understand the technologies that make up the Core of today's web services. 13,K2,CO2

OR

- b) Explain the virtualization structure for 4,K2,CO2
(i) Hypervisor and Xen Architecture. 4,K2,CO2
(ii) Binary Translation with Full Virtualization. 5,K2,CO2
(iii) Para-Virtualization with Compiler Support.

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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13. a) Compare: Public, Private and Hybrid clouds. 13,K2,CO3

OR

b) Analyze the challenges in architectural design of cloud and recommend the possible ways to overcome the challenges. 13,K2,CO3

14. a) Illustrate the following in detail :

(i) Demand-Driven Resource Provisioning. 5,K2,CO4

(ii) Event-Driven Resource Provisioning. 4,K2,CO4

(iii) Popularity-Driven Resource Provisioning. 4,K2,CO4

OR

b) Predict the benefits of different cloud Security standards. (SAML OAuth, OpenID, SSL/TLS). 13,K2,CO4

15. a) What are the programming supports of Google App Engine? Illustrate in detail about the Google File system. 13,K2,CO5

OR

b) Point out How cloud federation addresses the limitations in cloud computing. Explain in detail. 13,K2,CO5

PART- C (1 × 15 = 15 Marks)

a) Evaluate the HDFS concepts with suitable illustrations. Develop a word count application with Hadoop Map Reduce programming model. 15,K2,CO5

OR

b) Construct OpenStack open-source cloud computing infrastructure and discuss in detail about it. 15,K2,CO5