

B

1000CST423122204

Pages: 2

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S7 (R, S) / S5 (PT) (R, S) Examination December 2023 (2019 Scheme)



Course Code: CST423

Course Name: CLOUD COMPUTING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks.

Marks

- | | | |
|----|--|-----|
| 1 | Compare traditional computing and cloud computing. | (3) |
| 2 | Why cloud delivery models can be referred as a cloud service delivery model? | (3) |
| 3 | What is emulation virtualization? | (3) |
| 4 | Discuss pros and cons of virtualization. | (3) |
| 5 | Differentiate Multitenancy and Virtualization. | (3) |
| 6 | Explain OpenNebula cloud provider. | (3) |
| 7 | What are Authenticity and Availability in Security? | (3) |
| 8 | What are VMM and VM-based security threats. | (3) |
| 9 | Differentiate between Amazon S3 and Amazon EBS | (3) |
| 10 | List the storage services offered by Microsoft Azure. | (3) |

PART B

Answer any one full question from each module, each carries 14 marks.

Module I

- | | | |
|----|---|-----|
| 11 | a) Explain NIST reference cloud model with neat diagram. | (8) |
| | b) How IaaS provides cloud consumers with a high level of control and responsibility for its utilization? | (6) |

OR

- | | | |
|----|---|-----|
| 12 | a) List the benefits and challenges of cloud computing. | (6) |
| | b) Classify various types of cloud. | (8) |

Module II

- | | | |
|----|--|-----|
| 13 | a) Compare non virtual and virtual machine environments. | (6) |
| | b) Explain Para-virtualization with a neat diagram. | (8) |

OR

- 14 a) Explain storage virtualization with a diagram. (6)
b) What is Xen? Discuss its elements for virtualization. (8)

Module III

- 15 a) List the data centre technology components. Explain any two. (6)
b) Compare static and dynamic resource provisioning in cloud computing. Explain each with example. (8)

OR

- 16 a) Draw the Eucalyptus architecture and explain its key functionalities (6)
b) Explain components of MapReduce architecture and discuss its advantages with an example. (8)

Module IV

- 17 a) Write different types of internal security breaches in cloud computing. Also, explain the steps to reduce cloud security breaches. (6)
b) Explain operating system security in cloud computing. (8)

OR

- 18 a) What do you mean by risks management? Explain different types of ongoing risks management process. (8)
b) Discuss the security risks posed by shared images with suitable example. (6)

Module V

- 19 a) What does Elastic Compute Cloud (EC2)? Explain its features. (8)
b) Explain the architecture of Amazon S3. (6)

OR

- 20 a) Discuss the core components of Google App Engine. (8)
b) Write notes on Google Docs and Google Drive. (6)
