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1000CST423122207

Pages: 2

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S7 (R, S) / S5 (PT) (R,S) Examination November 2024 (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 | Differentiate between cluster computing and grid computing. | (3) |
| 2 | Explain the key features of SaaS with example | (3) |
| 3 | What is hypervisor? Explain the architecture of Xen hypervisor. | (3) |
| 4 | Explain the various types of Virtual Machines. | (3) |
| 5 | Write short notes on Pig Latin High Level Language. | (3) |
| 6 | What are the characteristics of Multitenant technology? | (3) |
| 7 | Write a note on confidentiality, integrity and availability. | (3) |
| 8 | List down the various types of threat agents. | (3) |
| 9 | What is Amazon Elastic Compute Cloud (EC2) of Amazon web services? | (3) |
| 10 | Discuss about Google Cloud storage offered by Google | (3) |

PART B

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

Module I

- | | | |
|----|--|------|
| 11 | a) Discuss the NIST cloud computing reference model with a neat diagram. | (10) |
| | b) Differentiate public and private clouds in terms of flexibility. | (4) |

OR

- | | | |
|----|---|------|
| 12 | a) Explain the characteristics, benefits and challenges of cloud computing. | (10) |
| | b) "A hybrid cloud is a combination of two or more other cloud deployment models". Justify the statement with an example. | (4) |

Module II

- | | | |
|----|---|-----|
| 13 | a) Discuss the various techniques used in machine virtualization. | (8) |
| | b) Compare Full Virtualization, Para-Virtualization and Hardware Assisted Virtualization. | (6) |

OR

- 14 a) What is VMware? Discuss its elements for virtualization. (9)
b) Explain the concept of operating system level virtualization with a neat diagram. (5)

Module III

- 15 a) What are the fundamental elements of web technology architecture of the web? (6)
b) Explain the data centre technologies enabling cloud. (8)

OR

- 16 a) What are the major functions of the MapReduce framework? Explain the logical data flow of MapReduce function using a suitable example. (9)
b) Explain the key features of Eucalyptus. (5)

Module IV

- 17 a) Describe the various kinds of cloud security threats in detail. (10)
b) Why is it harder to establish security in the cloud? (4)

OR

- 18 a) Discuss how virtual machine security can be achieved in cloud. (9)
b) Discuss the security risks posed by management OS with suitable examples. (5)

Module V

- 19 a) Illustrate Amazon Web Services echo system with suitable diagram. (9)
b) Describe the key concepts of Amazon Storage services. (5)

OR

- 20 a) With a neat diagram explain Microsoft Azure platform architecture. (9)
b) Describe the core components of Google AppEngine (5)
