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Question Paper Code: 31273

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

Seventh Semester

Computer Science and Engineering

01UCS703 - CLOUD COMPUTING

(Regulation 2013)

Duration: Three hours   Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. List the essential characteristics of cloud computing.

2. Compare and contrast utility computing and elastic computing.

3. What is Mashup? How is it useful?

4. Compare and contrast HBase with Amazon DynamoDB.

5. List the major categories of parallel computing systems.

6. What is Google BigTable?

7. What is trusted cloud computing?

8. Why Confidentiality, Integrity and Availability are considered as three main pillars for cloud software assurance?

9. List the security threats and vulnerabilities inherent in virtualized systems.

10. What is Quality of Service (QoS) monitoring in cloud computing?

PART - B (5 x 16 = 80 Marks)

11. (a) Enlist and explain various service models and deployment models of cloud computing.   (16)

Or

(b) Explain how Microsoft Azure differs from other open source cloud services. Also discuss the development facilities in Azure Cloud. (16)

12. (a) Compare the SOAP and REST paradigms in the context of programmatic communication between applications deployed on different cloud providers. (16)

Or

(b) (i) Explain the implementation procedure of AJAX with a diagram. (8)

(ii) How do you differentiate Multi-tenancy implementation using single schema and multiple schemas? (8)

13. (a) Explain the "Map Reduce" model for a words counting programme with a neat diagram. (16)

Or

(b) (i) Explain the services provided by the HDFS cloud from a user's perspective with an example. (8)

(ii) Explain the Architecture of GFS and its components. (8)

14. (a) What is secure execution environment and communication in cloud? Explain different threat and vulnerability specific to virtual machines. (16)

Or

(b) Why Cloud Computing brings new threats? Explain security issues of virtualization, vulnerability in virtualization and risk prevention in VMM. (16)

15. (a) Explain issues in cloud computing with respect to implementing real time application over cloud platform. (16)

Or

(b) Enlist and explain the principal design issues that are to be addressed while designing a QoS-aware distributed middleware architecture for cloud. (16)

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31273