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Question Paper Code	13738
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**M.E. - DEGREE EXAMINATIONS, APRIL / MAY 2025**

Second Semester

**M.E. - Computer Science and Engineering**

(Common to M.E. - Computer Science and Engineering (with Specialization in Networks))

**24PCSPC203 - CLOUD COMPUTING TECHNOLOGIES**

Regulations - 2024

Duration: 3 Hours

Max. Marks: 100

**PART - A (10 × 2 = 20 Marks)**

Answer ALL Questions

	<i>Marks</i>	<i>K- Level</i>	<i>CO</i>
1. Illustrate VM creation with suitable examples.	2	K2	CO1
2. State the purpose of virtual machine monitor.	2	K1	CO1
3. Recall resource pool.	2	K1	CO2
4. List the relative merits of virtualization at various levels.	2	K1	CO2
5. List the main characteristics of cloud computing.	2	K1	CO3
6. Compare cloud consumer and provider.	2	K2	CO3
7. Outline the function of a Job Tracker in Hadoop.	2	K2	CO4
8. Compare between traditional RDBMS with Map Reduce.	2	K2	CO4
9. Illustrate the different levels of cloud security.	2	K2	CO6
10. List the uses of application security.	2	K1	CO6

**PART - B (5 × 13 = 65 Marks)**

Answer ALL Questions

11. a) (i) Explain the taxonomy of Virtual Machines.	8	K2	CO1
(ii) Write short notes on Emulation in virtual machines.	5	K2	CO1

**OR**

b) (i) Discuss about the server consolidation in data centers.	7	K2	CO1
(ii) Illustrate about the virtual storage management.	6	K2	CO1

12. a) Interpret about Desktop and Memory virtualization process in detail with an example.	13	K2	CO2
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**OR**

b) Explain about the Implementation levels of Virtualization.	13	K2	CO2
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13. a) Illustrate in detail about the Layered Cloud Architecture design with neat diagram.	13	K2	CO3
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*K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create*

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**OR**

b) Outline and discuss about the different types of Resource provisioning. 13 K2 CO3

14. a) Analyze the structure of Eucalyptus and explain each of its components. 13 K4 CO4

**OR**

b) Compare and contrast about Open stack and Nimbus. 13 K4 CO4

15. a) Infer about the Cloud Infrastructure Security with suitable examples. 13 K2 CO6

**OR**

b) Discuss in detail about the Identity Access Management and Trust management. 13 K2 CO6

**PART - C (1 × 15 = 15 Marks)**

16. a) Inspect the HDFS concepts with suitable illustrations and write a word count application with Hadoop Map Reduce programming model. 15 K4 CO5

**OR**

b) Discover how to set up a private cloud for a Multispecialty Hospital using any one of the cloud environments. 15 K4 CO5