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**ND210315**

**Reg. No. :**

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|  | **MAHENDRA ENGINEERING COLLEGE**  (**AUTONOMOUS)** | | |
| **B.E/B.Tech. Degree Examinations - Nov. / Dec. – 2021**  Seventh Semester  **17IT14703 - Cloud Computing** | | |
| Duration:3.00 Hrs | |  | Maximum Marks:100 |

**PART-A (10 X 1 =10 Marks)**

|  |  |  |  |
| --- | --- | --- | --- |
| **I. Choose the best Answer** | | | **BTL** |
| 1. | Historical development of cloud computing includes | | K2 |
| a) Super computers | b) Distributed systems |  |
| c) Clusters | d) Desktops |  |
| 2. | Major characteristic of cloud as per NIST is | | K1 |
| a) Nice pricing | b) Measured service |  |
| c) Energy efficient | d) Conserve resource |  |
| 3. | Which of these techniques is vital for creating cloud computing centers? | | K2 |
| a) Parallelism | b) OOPs |  |
| c) Virtualization | d) Clusters |  |
| 4. | Physical infrastructure provides | | K1 |
| a) Web services | b) VM image repository |  |
| c) Cluster | d) All of the above |  |
| 5. | This type of cloud is open to the wider public | | K2 |
| a) community cloud | b) private cloud |  |
| c) public cloud | d) hybrid cloud |  |
| 6. | Hybrid cloud is also known as \_\_\_\_\_ | | K1 |
| a) Heterogeneous system | b) distributed cloud |  |
| c) heterogeneous cloud | d) heterogeneous and distributed system |  |
|  |  |  |  |
| 7. | This class is used to provide virtual cluster services | | K2 |
| a) Cluster GPU instances | b) Cluster compute instances |  |
| c) High-memory instances | d) Micro instances |  |
| 8. | TCB stands for | | K1 |
| a) Trusted component base | b) Trusted computing base |  |
| c) Top component base | d) Trust component builder |  |
| 9. | Which of the following platforms does Hadoop run on? | | K1 |
| a) Bare metal | b) Debian |  |
| c) Cross-platform | d) Unix-like |  |
| 10. | \_\_\_\_\_\_\_\_\_\_\_ part of the MapReduce is responsible for processing one or more chunks of data and producing the output results. | | K2 |
| a) Maptask | b) Mapper |  |
| c) Task execution | d) Partitioner |  |
| **PART- B (10 x 2 =20 Marks)** | | | BTL |
| 11. | Discuss the benefits of cloud computing. | | K2 |
| 12. | List the types of clouds with its purpose. | | K1 |
| 13. | Indicate the important features of SOAP message format. | | K2 |
| 14. | State the significance of web service. | | K1 |
| 15. | Compare cloud auditor and cloud broker. | | K2 |
| 16. | Show the interactions between actors in cloud computing. | | K2 |
| 17. | Mention the role of hypervisor. | | K2 |
| 18. | Give the significance of Identity management. | | K2 |
| 19. | Recall the need of Virtual Box. | | K2 |
| 20. | State the four levels of federation in cloud. | | K1 |

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|  |  |  | **PART- C (5 x 14 =70 Marks)** | | **BTL** |
| 21. | (a) |  | Elaborate the essential characteristics of cloud computing. | (14) | K2 |
|  |  |  | **(OR)** |  |  |
|  | (b) |  | Describe about challenges in cloud NIST guidelines. | (14) | K2 |
| 22. | (a) |  | Outline the concept of web services. Interpret the main technologies involved in the development of web services. | (14) | K3 |
|  |  |  | **(OR)** |  |  |
|  | (b) |  | Explain the concept of visualization support and disaster recovery. | (14) | K3 |
| 23. | (a) |  | Draw the architecture of cloud computing and explain the necessary components functionalities | (14) | K2 |
|  |  |  | **(OR)** |  |  |
|  | (b) |  | Paraphrase the (SaaS) Storage as a Service with example. Name few storage service providers. | (14) | K2 |
| 24. | (a) |  | Write the challenges in the Inter cloud resource management. Elaborate various types of resource provisioning methods. | (14) | K3 |
|  |  |  | **(OR)** |  |  |
|  | (b) |  | Summarize the security problems associated with cloud computing. | (14) | K2 |
| 25. | (a) |  | Produce the necessary steps involved in working of Hadoop with necessary diagram. | (14) | K2 |
|  |  |  | **(OR)** |  |  |
|  | (b) |  | Draw the architecture of Programming environment for Google App Engine and explain its components. | (14) | K3 |

**Bloom’s Taxonomy Level (BTL)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| BTL | Remember  (K1) | Understand (K2) | Apply (K3) | Analyze (K4) | Evaluate (K5) | Create  (K6) |
| Percentage of Questions | 12 | 43 | 45 | - | - | - |