Bharati Vidyapeeth's
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A-4, Paschim Vihar, New Delhi-63
Model Question Paper-I [Sem-III]

Paper Code: MCA-223	**Subject: Cloud Computing**
Time: 3 Hours	**Maximum Marks: 75**

Note: Attempt FIVE questions in all. Question No. 1 is compulsory and attempt one question from each unit.

1. Answer all the following questions briefly:-   2.5 x 10 = 25
 (a) What the different features are of cloud Computing?
 (b) Differentiate between the cloud computing and grid computing.
 (c) What is Utility Computing?
 (d) You need to install multiple guest OS on the top of single hardware. The hardware resources shared by the all mounted guest OS. The facility of sharing the resource might be provided by the host OS. Discuss the appropriate term which can resolve such issues.
 (e) What are the main characteristics of platform-as-a-service solution?
 (f) What is Google App Engine?
 (g) Discuss the IDAASs' different illustrations to clarify the difference between them.
 (h) Describe some examples of CRM and ERP implementation based on cloud computing technologies.
 (i) What does infrastructure-as-a-service refer to?
 (j) Distinguish between authentication and authorization.

UNIT - I

2. (a) Design the neat diagram of cloud computing reference model. Explain the Pros and Cons of cloud computing 3.5 +3
 (b) Differentiate between IaaS, PaaS, and SaaS. 6

3. (a) Discuss the Map-Reduce Algorithm in details. Illustrate the case there we can apply the map-reduce. 3+3
 (b) Suppose you are advised to discuss the detailed information of different types of cloud Architecture to the users. Illustrate with appropriate examples of the different types of cloud architecture. 3.5 +3

UNIT - II

4. (a) Give the taxonomy of the virtualization. Explain the hardware virtualization techniques. 6.5
 (b) Differentiate between Hypervisor-I, Hypervisor-II and KVM along with their pros and cons. 6

5. (a) Discuss the Xen Architecture in detail. 6.5
 (b) Explain Virtual LAN (VLAN) and Virtual SAN. Give their benefits. 6

UNIT – III

6. (a) Suppose you are requested to design and develop the Data Center for IBM. Discuss what constraints and technologies would be considered before the technologies expert.   6.5

(b) Discuss the different trust issues in cloud in respect of Industry direction and Operational and Technical Phasing.   6

7. (a) As a technologies expert, on which principles you are suggesting the technologies architecture.   5

(b) You are working as a Cloud Architect in your organization. You are requested to give an appropriate solution for the following constraints: 6.5

     1. At the same time multiple users may interact with the web application.

     2. The cost must be cheaper than any other platform.

     3. The migration of the servers would be done without interrupting the services of web application.

Analyse and discuss the detailed information about your solution.

UNIT – IV

8. (a) Describe the major features of the Aneka Application Model.   6.5
    (b) Discuss the cloud service for individual with an appropriate example.   6

9. (a) Assume you are requested to discuss the cloud solution for any cloud requirements. Discuss the best practices for the cloud services in detail.   5

    (b) Explain the features of Vmotion in detail. Discuss the pros and cons of Vmotion   3+ 3.5