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B.M.S. College of Engineering, Bengaluru-560019

Autonomous Institute Affiliated to VTU

February / March 2023 Semester End Main Examinations

Programme: B.E.

Semester: V

Branch: Information Science and Engineering

Duration: 3 hrs.

Course Code: 20IS5PCCLC

Max Marks: 100

Course: Cloud Computing

Date: 23.02.2023

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
2. Missing data, if any, may be suitably assumed.

UNIT - I

1 a) Identify the categories of cloud based on deployment along with relevant examples each. **06**
 b) List and explain various vSphere features offered by VMware. Elaborate any 4 of them. **08**
 c) Explain how do you consider the services for high availability? Illustrate with an example. **06**

OR

2 a) Discuss the challenges and risks with respect to Data Lock-In and Standardization in cloud computing. **06**
 b) Customer wants to deploy their application 'Bit coin mining' on Ubuntu, Red hat linux and Windows Server. Suggest the customer by explaining the pros and cons of various ways in which they can deploy the application along with appropriate diagrams. **08**
 c) Illustrate how programming models, Languages and frameworks contribute to PaaS. **06**

UNIT - II

3 a) Companies working in traditional datacenters decided to move to cloud. Discuss various steps involved in migrating their applications to cloud. **10**
 b) Analyze the Live migration anatomy to depict the transfer of memory and VM state from one host to another considering the suitable algorithm. **10**

UNIT - III

4 a) List and explain various design consideration features of security for cloud applications. **06**
 b) Campus portal has various departments as components in it. As a programmer give your suggestions what functionalities could be included as part of the ISE department component by giving the general design of it. **08**

Important Note: Completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages. Revealing of identification, appeal to evaluator will be treated as malpractice.

c) Identify the type of architecture suitable for Java Enterprise Edition? Highlight the important functionalities of it. **06**

UNIT - IV

5 a) Illustrate how object storage is suitable for cloud data compared to file storage. **06**

b) Discuss on what parameters you select the cloud storage classes for your data to be stored on the cloud. **08**

c) Discuss Google storage option used to access from anywhere through RESTful interface. **06**

UNIT - V

6 a) “Implementing cloud security is a shared responsibility between user and cloud service provider”, Justify this statement by taking one case study. **06**

b) Discuss the layered approach of implementing the security at Google cloud. **08**

c) Explain the principle of least privilege. **06**

OR

7 a) Rani Chennamma wants to use google cloud platform to run her applications. Give her the best practices followed by Google for security. **08**

b) Explain how server-side encryption of data at rest is implemented in Google cloud. **06**

c) Discuss HTTPS/TLS encryption. **06**
