21CSC4E3BL

Sl. No.

M.Sc. IV Semester Degree Examination, Sept./Oct. - 2024
COMPUTER SCIENCE
Cloud Computing
(NEP)

Time : 3 Hours   Maximum Marks : 70

Note : *Answer **any five** of the following questions with Question No.**1** is **Compulsory**, each question carries **equal** marks.*

---

1. (a) How does the Cloud Cube Model assist in evaluating cloud services based on various dimension ? **7**

   (b) According to the NIST model, what are the essential characteristics, service models, and deployment models of cloud computing ? **7**

2. (a) Discuss on communication protocols used in cloud computing. **7**

   (b) What is Software as a Service (SaaS) in the context of cloud computing ? **7**

3. (a) Why is capacity planning crucial, even though cloud services are often perceived as having unlimited and ubiquitous resources ? **7**

   (b) What is the importance of the LAMP solution stack in cloud computing, and how does it aid in the development and deployment of web applications ? **7**

4. (a) How does an Enterprise Service Bus (ESB) contribute to cloud computing environments ? **7**

   (b) Explain Event-driven SOA. **7**

5. (a) Discuss the security risks associated with cloud computing and how to evaluate and address those risks ? **7**

   (b) Discuss the implementation of claims-based identity and security services in the Windows Azure Platform. **7**

6. (a) Discuss the importance of identity management in network systems and explain how identity services function. **7**

 (b) What is virtualization in cloud computing, and how does it facilitate efficient resource management ? **7**

7. (a) How does Service oriented architecture facilitate the design, deployment, and interaction of various services within the cloud environment ? **7**

 (b) How does the concept of Storage location and tenancy in cloud computing impact data security, performance and regulatory compliance ? **7**

8. Write short notes on the following : **5+5+4**

 (a) Weinman's laws of Cloudonomics

 (b) System Metrics

 (c) SOA management tools

- o 0 o -