



Mid Term (Odd) Semester Examination October 2024

Roll no.....

Name of the Program: MCA Ist Semester

Paper Name: Cloud Computing

Course Code: TMC 113

Time: 1-1/2 Hour

MM: 50

Note: (i) All questions are compulsory.

(ii) Answer any one sub-questions among A and B in each main question.

(iii) Each question carries 10 marks.

Q1(a) Define Cloud Computing and Discuss Key Characteristics (10 Marks)

OR

Q1(b) Explain the Architecture of Compute Nodes in Cloud Computing (10 Marks)

Q2(a) Compare and contrast public, private, and hybrid clouds. What are the advantages and disadvantages of each? (10 Marks)

OR

Q2(b) Compare and contrast virtual machines (VMs) and containers in terms of resource allocation, isolation, and performance (10 Marks)

Q3(a) Differentiate between Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). Provide examples of each (10 Marks)

OR

Q3(b) Describe the steps involved in configuring a compute node for cloud deployment. What factors need to be considered (10 Marks)

Q4(a) Explain the role of virtualization in cloud computing. How does it enhance resource management (10 Marks)

OR

Q4(b) Discuss the key features of Amazon EC2 and how they support scalable computing (10 Marks)

1. Overview of Amazon EC2 (2 Marks)

Q5(a) Compare the service offerings of Amazon Web Services (AWS) and Microsoft Azure. What are their unique features? (10 Marks)

OR

Q5(b) Discuss the Importance of Load Balancing in Compute Node Architecture (10 Marks)

1. Definition of Load Balancing (2 Marks)