| Roll No |  |  |  |  |  |
|---------|--|--|--|--|--|
|         |  |  |  |  |  |



# PRESIDENCY UNIVERSITY BENGALURU

**SET B** 

# SCHOOL OF INFORMATION SCIENCE END TERM EXAMINATION - DEC 2023

Semester: Semester V - 021 Date: 03-JAN-2024

Course Name: Essentials of Cloud Computing

Program: B.Sc. Data Science

Max Marks: 100

Weightage: 50%

#### Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

#### **PART A**

#### **ANSWER ALL THE QUESTIONS**

4X5M=20M

1. Describe Issues, benefits of cloud computing.

(CO1) [Knowledge]

2. Explain different types of Hypervisors

(CO2) [Knowledge]

3. Explain SaaS in detail

(CO3) [Knowledge]

**4.** Describe load Balancing for improving the cloud Performance.

(CO4) [Knowledge]

# **PART B**

### **ANSWER ALL THE QUESTIONS**

5X10M=50M

**5.** Cloud computing has become increasingly popular in recent years as businesses look for ways to reduce costs, improve efficiency, and increase agility. Describe issues, advantages and disadvantage of Cloud Computing.

(CO1) [Comprehension]

- **6.** explain the following:
  - a) hardware virtualisation
  - b) application virtualisation
  - c) paravirtualisation
  - d) criteria of VMM.

(CO2) [Comprehension]

about:blank 1/2

**7.** Google App Engine is a cloud computing platform that allows developers to build and host web applications and mobile backends. Summerize the services, advantages, disadvantages of Google App Engine.

(CO3) [Comprehension]

8. Cloud storage is a model of data storage in which the digital data is stored in logical pools, the physical storage spans multiple servers (sometimes in multiple locations), and the physical environment is typically owned and managed by a hosting company. Explain Cloud Storage and Cloud database solutions in detail

(CO4) [Comprehension]

**9.** Cloud computing has revolutionized the way businesses and individuals store, manage, and process data. Summerize the reasearch trends in cloud computing

(CO4) [Comprehension]

## **PART C**

#### **ANSWER ALL THE QUESTIONS**

2X15M=30M

- **10.** Interpret the features of the following clouds:
  - 1) AWS
  - 2) Google App Engine
  - 3) Microsoft Azure

(CO3) [Application]

11. Fog computing is a decentralized computing infrastructure in which resources and services are distributed among various devices at the edge of the network, such as routers, switches, and access points. Illustrate Fog Computing in detail.

(CO4) [Application]

about:blank 2/2