

# Week 11 : Assignment 11

Your last recorded submission was on 2024-09-29, 23:15 IST

Due date: 2024-10-09, 23:59 IST.

- 1) Which of the following best describes the key features of dew computing? 1 point
- ☒ a. Independence and collaboration
  - ☐ b. Independence and centralization
  - ☐ c. Collaboration and decentralization
  - ☐ d. Connectivity and scalability
- 2) Which of the following best describes serverless computing? 1 point
- ☐ a. Developers manage scalability and orchestration of containers.
  - ☒ b. Developers run their logic as functions, and the cloud provider manages scalability
  - ☐ c. Developers handle all containerization and runtime environments.
  - ☐ d. Developers run their applications directly on dedicated servers.
- 3) Which of the following best describes Function-as-a-Service (FaaS)? 1 point
- ☐ a) Functions run continuously and scale vertically.
  - ☒ b) Functions are triggered by events and executed in isolated environments.
  - ☐ c) Functions are always active and manage their own scaling.
  - ☐ d) Functions are large, continuously running parts of an application.
- 4) How does Serverless Computing differ from traditional Cloud Computing? 1 point
- ☐ a) It focuses on system administrators and exposes server management.
  - ☒ b) It targets programmers by abstracting server management and simplifying development.
  - ☐ c) It requires developers to handle all operational responsibilities.
  - ☐ d) It makes cloud software development more complicated.
- 5) What is a key benefit of using AWS Lambda for running code? 1 point
- ☐ a) You need to manage AWS resources and scaling.
  - ☐ b) You have to focus on operating system management and provisioning.
  - ☒ c) You upload code and AWS Lambda handles execution and scaling based on events.
  - ☐ d) You must manually handle event sources and log streams.

5) What is a key benefit of using AWS Lambda for running code?

1 point

- ☐ a) You need to manage AWS resources and scaling.
- ☐ b) You have to focus on operating system management and provisioning.
- ☒ c) You upload code and AWS Lambda handles execution and scaling based on events.
- ☐ d) You must manually handle event sources and log streams.

6) What does Google Cloud Functions primarily handle in terms of execution environment?

1 point

- ☐ a) Server-based environments with manual provisioning
- ☒ b) Fully managed environments with automatic scaling
- ☐ c) Local environments requiring extensive server management
- ☐ d) Dedicated virtual machines for each function

7) What is the primary focus of Azure Functions for developers?

1 point

- ☐ a. Managing and maintaining servers
- ☒ b. Writing code and configuring functions
- ☐ c. Handling infrastructure scaling manually
- ☐ d. Deploying compiled languages only

8) What is one major challenge of using renewable energy sources in cloud datacenters?

1 point

- ☒ a) High capital costs and unpredictability
- ☐ b) Increased server maintenance requirements
- ☐ c) Higher energy consumption from non-renewable sources
- ☐ d) Decreased system reliability

9) What is the primary focus of the power manager component in a sustainable cloud computing datacenter?

1 point

- ☐ a. Controlling the temperature of the datacenter
- ☒ b. Managing the power supply from renewable and grid sources
- ☐ c. Handling virtual machine migrations
- ☐ d. Scheduling workloads to balance energy use

10) Which component of sustainable cloud computing aims to balance the temperature in cloud datacenters to enhance energy efficiency?

1 point

- ☐ a. Application Design
- ☐ b. Capacity Planning
- ☒ c. Cooling Management
- ☐ d. Renewable Energy

You may submit any number of times before the due date. The final submission will be considered for grading.

**Submit Answers**