**1.What is the primary function of a server? /1mark**

A) To store personal data

B) To manage network traffic

C) To provide resources, data, and services to other computers

D) To act as an operating system

**Answer:** C) To provide resources, data, and services to other computers

**2. Which of these is NOT a Linux distribution? /1mark**

A) Fedora

B) Ubuntu

C) Windows

D) openSUSE

**Answer:** C) Windows

**3. Which of the following is an operating system similar to Windows and Mac OS? /1mark**

A) Node

B) Linux

C) Container

D) DevSecOps

**Answer:** B) Linux

**4. What does DevOps combine? /1mark**

A) Development and Testing

B) Development and Operations

C) Security and Testing

D) Security and Operations

**Answer:** B) Development and Operations

**5. What does the “Ops” in DevOps stand for? /1mark**

A) Options

B) Operations

C) Optimization

D) Organization

**Answer:** B) Operations

**6. What does DevSecOps add to DevOps? /1mark**

A) Security integration throughout the software development lifecycle

B) More development stages

C) More testing stages

D) System updates

**Answer:** A) Security integration throughout the software development lifecycle

**7. What is a container in software development? /1mark**

A) A system for managing operating systems

B) A form of OS virtualization containing everything needed to run an application

C) A storage unit for data only

D) A tool to manage servers

**Answer:** B) A form of OS virtualization containing everything needed to run an application

**8. What is the purpose of Infrastructure as Code (IaC)? /1mark**

A) To automate the creation of network services

B) To automate the creation of infrastructure environments

C) To automate the development process

D) To improve client communication

**Answer:** B) To automate the creation of infrastructure environments

**9. CI/CD stands for: /1mark**

A) Continuous Integration and Continuous Deployment

B) Continuous Infrastructure and Continuous Delivery

C) Code Integration and Code Deployment

D) Customer Integration and Customer Development

**Answer:** A) Continuous Integration and Continuous Deployment

**10. What is the main advantage of Infrastructure as a Service (IaaS)? /1mark**

A) Reduces need for physical spaces for servers

B) Provides only virtual machines

C) Limits cloud access

D) Only stores data

**Answer:** A) Reduces need for physical spaces for servers

**11. What is the purpose of Continuous Integration (CI) in CI/CD? /1mark**

A) To automate production deployments

B) To frequently integrate code changes into a shared repository

C) To manage infrastructure as code

D) To create network servers

**Answer:** B) To frequently integrate code changes into a shared repository

**12. In CI/CD, which phase involves automatic deployment of updates to the production environment? /1mark**

A) Continuous Integration

B) Continuous Delivery

C) Continuous Development

D) Continuous Deployment

**Answer:** D) Continuous Deployment

**13. Which statement best describes Infrastructure as Code (IaC)? /1mark**

A) It involves creating infrastructure manually.

B) It uses code to automate infrastructure setup and management.

C) It is a physical process for managing servers.

D) It only applies to testing environments.

**Answer:** B) It uses code to automate infrastructure setup and management.

**14. Which Linux distribution is popular for its user-friendly interface and extensive community support? /1mark**

A) Fedora

B) Arch Linux

C) Ubuntu

D) CentOS

**Answer:** C) Ubuntu

**15. DevSecOps is implemented primarily to: /1mark**

A) Improve customer service

B) Reduce the risk of security vulnerabilities in code releases

C) Increase the speed of software development

D) Create virtual machines

**Answer:** B) Reduce the risk of security vulnerabilities in code releases

**16. What is the meaning of the following key terms of servers? /5marks**

1. **Web Server**: Hosts websites and delivers web content to users. Common software includes Apache.
2. **Database Server**: Stores, retrieves, and manages data for applications. Examples include MySQL, and MongoDB.
3. **Application Server**: Hosts and manages applications for client computers, often serving business logic to web applications.
4. **File Server**: Manages and provides centralized file storage that can be accessed by other computers on a network.
5. **Mail Server**: Manages the sending, receiving, and storage of emails.
6. **Game Server**: Hosts online games, allowing players to interact in real-time.