1. What is the primary goal of DevOps?

* Faster development only
* Better collaboration between teams
* Reducing the need for automation
* Cost reduction

2 Which DevOps principle involves automating manual and repetitive tasks to enhance efficiency?

* Collaboration
* Automation
* Agility
* Security

3. What is the key benefit of Continuous Integration (CI) in DevOps?

* Faster application deployment
* Improved security
* Early detection of issues
* Reduced infrastructure costs

4. In DevOps, what is meant by 'Infrastructure as Code' (IaC)?

* Writing code for application features
* Using code to automate infrastructure provisioning
* Using code to create documentation
* A code review process

5. Which DevOps practice is concerned with continuously monitoring software in production to provide feedback loops for further improvements?

* Continuous Integration (CI)
* Continuous Delivery (CD)
* Continuous Monitoring
* Continuous Deployment (CD)

6. What does 'CI' stand for in CI/CD?

* Continuous Integration
* Continuous Inspection
* Continuous Implementation
* Continuous Iteration

7. What is the primary goal of Continuous Delivery (CD)?

* Automatically deploying code changes to production
* Continuously inspecting code for errors
* Ensuring code is never deployed to production
* Making code available for deployment at any time

8. What is the key advantage of Continuous Deployment (CD) over Continuous Delivery (CD)?

* Faster development cycle
* Higher code quality
* Automated production deployment
* Reduced development effort

9. What is the purpose of a CI/CD pipeline?

* To develop code
* To integrate code
* To deploy code
* To store code

10. Which aspect of CI/CD is responsible for managing releases and controlling deployment to production?

* Continuous Integration
* Continuous Monitoring
* Continuous Deployment
* Release Management

11. What is Docker primarily used for?

* Virtualizing hardware
* Managing databases
* Containerizing applications
* Developing mobile apps

12. What is the purpose of a Dockerfile?

* Running Docker containers
* Building Docker images
* Managing Docker Hub
* Orchestrating containers

13. What does a Docker container provide compared to a virtual machine (VM)?

* Greater isolation
* Smaller size
* More efficient resource usage
* Full OS virtualization

14. Which Docker component is responsible for maintaining network rules to ensure traffic reaches the appropriate container?

* Docker Registry
* Docker Hub
* Kubelet
* Kube Proxy

15. What is the purpose of Docker Compose?

* Building Docker images
* Orchestrating containers
* Managing Docker clusters
* Running virtual machines