DevOps Pre-assessment test -- 50 MCQs

### 1. **What does "DevOps" primarily focus on?**

* A) Software development only
* B) IT operations only
* C) Collaboration between development and operations
* D) Project management

**Answer: C) Collaboration between development and operations**

### 2. **What is a primary goal of DevOps?**

* A) To increase the development time
* B) To improve communication and collaboration between teams
* C) To create new programming languages
* D) To write more code

**Answer: B) To improve communication and collaboration between teams**

### 3. **Which of the following is an example of a DevOps tool for Continuous Integration (CI)?**

* A) Docker
* B) Jenkins
* C) Git
* D) Jira

**Answer: B) Jenkins**

### 4. **What is Continuous Delivery (CD)?**

* A) A process of shipping updates to users manually
* B) A process that automatically deploys code to production after testing
* C) A method to write code in a fast way
* D) A way to build better documentation

**Answer: B) A process that automatically deploys code to production after testing**

### 5. **Which of the following is used to containerize applications?**

* A) Git
* B) Docker
* C) Jenkins
* D) Terraform

**Answer: B) Docker**

### 6. **What is the purpose of version control systems like Git?**

* A) To manage different versions of code
* B) To create new programming languages
* C) To run code faster
* D) To perform software testing

**Answer: A) To manage different versions of code**

### 7. **Which tool is commonly used for Infrastructure as Code (IaC)?**

* A) Docker
* B) Terraform
* C) Jenkins
* D) Kubernetes

**Answer: B) Terraform**

### 8. **What does CI/CD stand for?**

* A) Continuous Integration/Continuous Deployment
* B) Continuous Integration/Continuous Debugging
* C) Constant Integration/Continuous Delivery
* D) Continuous Intelligence/Continuous Debugging

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

### 9. **Which programming language is commonly used in DevOps automation scripts?**

* A) Java
* B) Python
* C) C++
* D) Ruby

**Answer: B) Python**

### 10. **What is a microservice?**

* A) A small, single-purpose application that can communicate with others
* B) A large, monolithic application
* C) A program that builds software
* D) A tool for testing software

**Answer: A) A small, single-purpose application that can communicate with others**

### 11. **What is the main advantage of using microservices?**

* A) It simplifies the code base
* B) It allows for easier scaling and maintenance of services
* C) It reduces the need for software testing
* D) It removes the need for collaboration

**Answer: B) It allows for easier scaling and maintenance of services**

### 12. **Which tool is used to manage containers in a DevOps pipeline?**

* A) Docker
* B) Kubernetes
* C) Jenkins
* D) Jira

**Answer: B) Kubernetes**

### 13. **What is the purpose of automated testing in DevOps?**

* A) To replace manual testing entirely
* B) To test code manually
* C) To ensure that software behaves as expected without manual intervention
* D) To deploy the software to production

**Answer: C) To ensure that software behaves as expected without manual intervention**

### 14. **What does the "monitoring" phase of DevOps involve?**

* A) Writing new code
* B) Watching the software live to ensure it works correctly
* C) Debugging software errors
* D) Managing the code version history

**Answer: B) Watching the software live to ensure it works correctly**

### 15. **What is an example of a monitoring tool in DevOps?**

* A) Docker
* B) Nagios
* C) Jenkins
* D) Git

**Answer: B) Nagios**

### 16. **What is the function of a version control system like Git?**

* A) It tracks code changes and collaboration between developers
* B) It helps test software
* C) It helps deploy software
* D) It helps monitor production systems

**Answer: A) It tracks code changes and collaboration between developers**

### 17. **Which DevOps practice aims to reduce the time it takes to go from development to production?**

* A) Continuous Integration (CI)
* B) Manual Testing
* C) Static Analysis
* D) Documentation Writing

**Answer: A) Continuous Integration (CI)**

### 18. **Which cloud service is commonly used in DevOps for hosting applications?**

* A) AWS (Amazon Web Services)
* B) Spotify
* C) Microsoft Word
* D) Photoshop

**Answer: A) AWS (Amazon Web Services)**

### 19. **What does the term "infrastructure as code" mean?**

* A) Writing code that automatically generates hardware
* B) Managing and provisioning IT infrastructure through machine-readable files
* C) Writing code for cloud databases
* D) Coding software without using a computer

**Answer: B) Managing and provisioning IT infrastructure through machine-readable files**

### 20. **What is the purpose of the DevOps "feedback loop"?**

* A) To provide constant updates to customers
* B) To improve software quality and collaboration
* C) To slow down software delivery
* D) To remove unnecessary steps in the process

**Answer: B) To improve software quality and collaboration**

### 21. **Which of the following is NOT a goal of DevOps?**

* A) Faster delivery of features
* B) Increased collaboration between development and operations
* C) Reducing costs through manual labor
* D) Improved software quality

**Answer: C) Reducing costs through manual labor**

### 22. **What is the function of a "build server" in a DevOps pipeline?**

* A) To compile code and generate executable files
* B) To deploy the software to production
* C) To run security checks on the code
* D) To manage the version control system

**Answer: A) To compile code and generate executable files**

### 23. **What is Continuous Integration (CI)?**

* A) A process where developers integrate their code into a shared repository frequently
* B) A process of delivering software after every build
* C) A method to monitor network security
* D) A way to test software manually

**Answer: A) A process where developers integrate their code into a shared repository frequently**

### 24. **Which tool is primarily used for automating the deployment process?**

* A) Jenkins
* B) Git
* C) Kubernetes
* D) Docker

**Answer: A) Jenkins**

### 25. **What is an advantage of using containers in DevOps?**

* A) Easier to maintain a single application
* B) Applications run faster in containers
* C) It helps to avoid configuration issues between development and production environments
* D) Containers increase hardware cost

**Answer: C) It helps to avoid configuration issues between development and production environments**

### 26. **What does "scalability" mean in a DevOps context?**

* A) The ability of a system to adapt to growing demands
* B) The ability of a system to perform automated testing
* C) The speed at which code can be written
* D) The time taken to deploy a system

**Answer: A) The ability of a system to adapt to growing demands**

### 27. **Which is an example of a tool used for configuration management in DevOps?**

* A) Kubernetes
* B) Ansible
* C) Git
* D) Docker

**Answer: B) Ansible**

### 28. **What is a "deployment pipeline"?**

* A) A series of automated steps for deploying software
* B) A way of writing code for large systems
* C) A tool for managing servers
* D) A process to build databases

**Answer: A) A series of automated steps for deploying software**

### 29. **Which of these helps DevOps teams track work progress?**

* A) Git
* B) Jira
* C) Docker
* D) Jenkins

**Answer: B) Jira**

### 30. **What is the primary purpose of a "test environment" in DevOps?**

* A) To write code
* B) To simulate the production environment and run tests
* C) To deploy the code to the end-users
* D) To monitor the network

**Answer: B) To simulate the production environment and run tests**

### 31. **Which of these is a key DevOps principle?**

* A) Speed and quality are at odds
* B) Collaboration between development and operations is essential
* C) Development should work in isolation from operations
* D) Testing should only be done at the end of the cycle

**Answer: B) Collaboration between development and operations is essential**

### 32. **Which is an example of a version control system used in DevOps?**

* A) Docker
* B) Git
* C) Jenkins
* D) AWS

**Answer: B) Git**

### 33. **What does "continuous monitoring" refer to in DevOps?**

* A) Watching the software's performance during the deployment process
* B) Constantly checking the hardware
* C) Running tests on the code manually
* D) Monitoring network traffic

**Answer: A) Watching the software's performance during the deployment process**

### 34. **What is a "branch" in Git?**

* A) A part of the server
* B) A separate version of the code where changes can be made without affecting the main codebase
* C) A system that deploys software
* D) A tool for monitoring software performance

**Answer: B) A separate version of the code where changes can be made without affecting the main codebase**

### 35. **Which of these tools is used for containerization in DevOps?**

* A) Docker
* B) Kubernetes
* C) Jenkins
* D) Git

**Answer: A) Docker**

### 36. **What is the purpose of using "cloud computing" in DevOps?**

* A) To store documents
* B) To run applications and services remotely, scaling as needed
* C) To avoid using servers
* D) To perform testing faster

**Answer: B) To run applications and services remotely, scaling as needed**

### 37. **What does "automation" in DevOps refer to?**

* A) Writing code manually
* B) Using tools and scripts to perform tasks automatically, such as testing and deployment
* C) Managing hardware manually
* D) Conducting all tasks manually

**Answer: B) Using tools and scripts to perform tasks automatically, such as testing and deployment**

### 38. **What is a common benefit of using the DevOps methodology?**

* A) Slower release cycles
* B) Faster and more reliable software delivery
* C) More bugs in software
* D) Decreased collaboration between teams

**Answer: B) Faster and more reliable software delivery**

### 39. **Which is a key challenge DevOps aims to solve?**

* A) Faster internet speeds
* B) Reducing the gap between development and operations teams
* C) Reducing server storage space
* D) Increasing costs for software development

**Answer: B) Reducing the gap between development and operations teams**

### 40. **Which term describes the process of automatically scaling systems in response to changes in demand?**

* A) Autoscaling
* B) Version control
* C) Microservices
* D) Continuous integration

**Answer: A) Autoscaling**

### 41. **What is an example of a logging tool in DevOps?**

* A) Jenkins
* B) Elasticsearch
* C) Kubernetes
* D) Docker

**Answer: B) Elasticsearch**

### 42. **Which of these helps DevOps teams build infrastructure automatically?**

* A) Jenkins
* B) Terraform
* C) Git
* D) Docker

**Answer: B) Terraform**

### 43. **What is the primary benefit of using containers like Docker?**

* A) They speed up the code-writing process
* B) They allow applications to run the same way on any environment
* C) They reduce the need for testing
* D) They eliminate the need for cloud computing

**Answer: B) They allow applications to run the same way on any environment**

### 44. **Which tool is used for orchestration of containers in a DevOps pipeline?**

* A) Git
* B) Kubernetes
* C) Jenkins
* D) Docker

**Answer: B) Kubernetes**

### 45. **What is a "commit" in Git?**

* A) A change to the code that is saved in the version control system
* B) A command to deploy software
* C) A type of testing
* D) A stage in the pipeline

**Answer: A) A change to the code that is saved in the version control system**

### 46. **What is the main role of an Operations team in DevOps?**

* A) Writing code
* B) Managing infrastructure and deployment
* C) Designing user interfaces
* D) Creating marketing strategies

**Answer: B) Managing infrastructure and deployment**

### 47. **Which of these is a feature of Continuous Deployment?**

* A) Only code is built, no deployment occurs
* B) Code is automatically deployed after passing tests
* C) No testing is required
* D) Code is manually deployed

**Answer: B) Code is automatically deployed after passing tests**

### 48. **What is a "pull request" in Git?**

* A) A request to deploy the software
* B) A request to merge changes from one branch to another
* C) A command to run tests
* D) A tool for container management

**Answer: B) A request to merge changes from one branch to another**

### 49. **What is the role of DevOps in Agile development?**

* A) DevOps focuses on development speed without considering deployment
* B) DevOps integrates deployment and operations with Agile processes
* C) DevOps only works on testing
* D) DevOps is unrelated to Agile

**Answer: B) DevOps integrates deployment and operations with Agile processes**

### 50. **Why is collaboration important in DevOps?**

* A) To speed up the development process
* B) To ensure teams work together and solve problems more efficiently
* C) To avoid any bugs in software
* D) To decrease the need for testing

**Answer: B) To ensure teams work together and solve problems more efficiently**