

# QCM Exam DEVOPS

**1. Which of the following statements are true regarding immutable servers ? Choose 2 correct answers.**

- A. In case of small changes, immutable servers must be rebuilt and redeployed.**
- B. Immutable servers store persistent data and can not be deleted without data loss.
- C. Preparation and configuration tasks are moved from the time of deployment to the time of building.**
- D. Immutable servers cannot use external services such as databases and object stores.
- E. All interactions with immutable servers have to happen through shared file systems.

**2. If an application consists of multiple microservices which persist data and run on a container platform with multiple hosts. How many databases are typically used ?**

- A One database per microservice
- B One database per microservice instance
- C One database per application
- D One database per container host**
- E One database per container

**3. Which of the following software development processes are agile ? Chosse 2 correct**

- A KANBAN**
- B Rational Unified Process
- C V-Model
- D Scrum**
- E Waterfall

**4. Which git command show the changes contained in the last three commits ?**

**git diff HEAD^^^**

**5. When compiling an application, the compiler raises an error related to line 587 of the file main.c. If the source code of the application is managed in a git repository, which command reports the last changes made to the erroneous of code ?**

**git blame -L 586,588 main.c**

**6. Which of the following goals belong to continuous delivery ? Choose 3 correct answers.**

- A Avoid unnecessary deployments by grouping updates over a specific amount of time.**

**B Run the same artifacts in production that were used for testing .**

C Provide immediate feedback about the functionality of source code changes.

D Minimize the number of automated unit and acceptance tests.

**E Reduce the time from developing a feature to delivering it to clients.**

### **7. How do unit tests work ?**

A Professional testers run the application to manually investigate its behavior when using new feature.

B The test interacts with the elements of the user interface of the tested application to trigger specific actions.

C A compiler is called to verify the syntax and logic of the source code of the tested application.

**D Methods are called with specific parameters and their effect is compared to the desired result.**

E The external API of the tested service is called and the returned values are compared to the correct result.

### **8. What is A/B Testing ?**

Two different versions of the same user interface are run in parallel to gather comparable metrics about the competing versions.

### **9. Which of the following post condition exist in a jenkins declarative pipeline ?**

**A always**

B never

C pending

**D success**

E partial

### **10. Which of the following instructions in a Dockerfile can download a file via HTTP into the container image ?**

A CURL

B COPY

C WGET

**D ADD**

E PLACE

### **11. Which of the following directives in a Dockerfile are evaluated when a new container is created from an existing image built from the Dockerfile ? Choose 2**

A COPY

B ADD

**C EXPOSE**

D RUN

E CMD

12. Which of the following elements exist in a Docker Compose file ? Choose three

A volumes

B services

C containers

D nodes

E networks

13. In a docker Swarm, what is the unique property of a replicated service ? Choose 2

A it can run multiple times in the swarm

B it runs a shadow copy of each container on another swarm node

C it always runs all replicas on the same single node in the swarm

D it can run on an arbitrary number of swarm nodes

E it always runs on every node in the swarm.

14. Which of the following container properties are shared by all containers within a kubernetes Pod ? Choose 2

A all resources limits and requests

B all labels assigned to the containers

C The container base image

D the IP address and networking ports

E all storage volumes

15. What rôle does etcd play in a container cluster ?

Kubernetes stores its cluster configuration and runtime information in etcd.

16. Which cloud-init modules have to be used in order to partition a persistent volume, create file systems on the partitions and mount the file systems ? Choose 3

A mounts

B directories

C disk\_setup

D volume\_setup

E fs\_setup

17. What is the default location of the ansible inventory configuration file ?

/etc/ansible/hosts.

**18. What command line option instructs ansible-playbook to switch to a privileged user account before running tasks on a target system ?**

**--become-user**

**19. Which ansible keyword allows tasks to be run only under specific conditions ?**

**When.**

**20. Which ansible command is used to create and edit encrypted files which contain secrets used by ansible when configuring remote systems ?**

**Ansible-vault.**

**21. Which puppet subcommand applies a manifest to the local computer without requiring a Puppet Master ?**

**apply.**

**22. Which of the following kinds of metrics types can Prometheus collect ? Choose 3**

**A State**

**B Histogram**

**C Counter**

**D Dictionary**

**E Summary**