Cloud Computing

Assignment- Week 10

TYPE OF QUESTION: MCQ/MSQ

Number of questions: **10** **Total mark: 10 X 1 = 10**

QUESTION 1:

Post-copy and Pre-copy migration approaches are employed in :

a. Live Migration process

b. Non-live Migration process

c. Hybrid Migration process

d. None of these

Correct Answer: a

Detailed Solution: Both Post-copy and Pre-copy are approaches for the live migration process.

QUESTION 2:

Kubernetes operates at the hardware level.

a. True

b. False

Correct Answer: b

Detailed Solution: Kubernetes operates at the container level. (Slide 96)

QUESTION 3:

What is(are) the key advantage(s) of Docker?

a. Facilitating microservices

b. Modeling networks.

c. Packaging software

d. None of these

Correct Answer: a,b,c

Detailed Solution: Facilitating microservices, packaging software, and modeling networks for initiating multiple isolated containers on a single machine, are the key advantages of Docker. (slide - 73)

QUESTION 4:

Which of the following statements is most appropriate about Docker ?

a. Docker is a platform that allows to build and run but not ship apps.

b. Docker is a platform that allows to build and ship but but not to run apps.

c. Docker is a platform that allows to build, ship and, run apps.

d. Docker is a platform that only allows to ship and run but not to build apps.

Correct Answer: c

Detailed Solution: Docker is a platform that allows to build, ship and, run any app anywhere. (page - 65)

QUESTION 5:

In Docker utility, _____ is a collection of filesystem layers and some metadata that, if taken together, can be spun up as Docker containers.

a. Operating System

b. Microservice

c. Virtual Machine

d. Image

Correct Answer: d

Detailed Solution: In Docker utility, an image is a collection of filesystem layers and some metadata which if taken together, can be spun up as Docker containers. (slide - 77)

QUESTION 6:

Containers are similar to VMs but they have unrelaxed isolation properties to share the operating system among the applications.

a. True

b. False

Correct Answer: b

Detailed Solution: Containers are similar to VMs but they have relaxed isolation properties to share operating systems among the applications. Therefore, containers are considered lightweight.

QUESTION 7:

Choose the most appropriate option.

Statement 1: Container is a lightweight virtualization technique.

Statement 2: Container contains the code and all its dependencies.

a. Only statement 1 is true

b. Only statement 2 is true

c. Both statement 1 and 2 are true

d. Bothe the statements are false

Correct Answer: c

Detailed Solution: Container is a lightweight virtualization technique. Container contains the code and all its dependencies so the applications run quickly. (slide - 46)

QUESTION 8:

Private Docker registry is a service that stores Docker images.

a. True

b. False

Correct Answer: a

Detailed Solution: Private Docker registry is a service that stores Docker images.

Moreover, Docker on the host machine is split into two parts- a daemon with RESTful API and a client who talks with the daemon.

QUESTION 9:

Docker builds offer enhanced reproducibility and replicability compared to conventional software development approaches.

a. True

b. False

Correct Answer: a

Detailed Solution: Docker builds are more reproducible and and replicable than traditional software building methods. This makes implementing CD much easier. (Slide - 76)

QUESTION 10:

Given the VM memory size of 1024 GB and the transmission rate of 16 MB/sec
What are the total migration time and downtime for non-live VM migration? Choose the most appropriate option.
a. 20 hours, 25 hours
b. 18 hours,18 hours
c. 16 hours, 16 hours
d. 24 hours,20 hours

Correct Answer: b
Detailed Solution: Total Migration time = VM memory size/ transmission rate
=(1024x2^30)/(16x2^20)=65536 secs= 18 hours.
For non-live migration, overall migration time is the same as overall downtime.