Week 12 Practice Questions with Solutions

1] Which of the following are more important during development of an app than during deployment? [MSQ]

1. editor with syntax highlighting
2. debugger with breakpoints
3. uninterrupted power supply
4. high bandwidth network connectivity

Answer: Option 1 and 2.

Solution: Others are more important when deployed.

2] Which of the following would be considered part of the infrastructure provided by a data centre? [MSQ]

1. uninterrupted power supply
2. employment
3. rack space for servers
4. air conditioning

Answer: Option 1, 2 and 4.

Solution: Employment is a side effect that infrastructure.

3] Content delivery networks are used to __ . [MCQ]

1. reduce load on servers by hosting static assets like images and scripts
2. increase security of servers
3. provide free hosting for dynamic websites
4. all of the above

Answer: Option 1.

Solution: Others are not really relevant for a CDN.

4] Frontend of an application refers to the part that interacts with __. [MCQ]

1. database
2. server
3. end user
4. All of the above

Answer: Option 3.

Solution: Frontend of an application refers to the part that interacts with end user.

5] SaaS providers take responsibility for __ . [MSQ]

1. installing software
2. keeping software up to date with security patches

3. providing uninterrupted power
4. providing documentation for developers

Answer: Option 1 and 2.

Solution: Others are out of scope of SaaS.

6] IaaS providers take responsibility for __ . [MCQ]

1. installing software
2. keeping software up to date with security patches
3. providing uninterrupted power
4. providing documentation for developers

Answer: Option 3.

Solution: Others are not considered infrastructure

7] PaaS providers take responsibility for __ . [MCQ]

1. installing security patches on applications developed by outside users
2. providing uninterrupted power
3. installing security patches on operating systems and frameworks
4. None of the above

Answer: Option 3.

Solution: OS and framework are set up by the PaaS provider

8] Consider the following statements and choose the correct option. [MCQ]

Statement 1: git is a form of centralized version control
Statement 2: git can be used to implement centralized version control

1. Both, statement 1 and 2 are correct.
2. Both, statement 1 and 2 are incorrect.
3. Statement 1 is correct but, statement 2 is incorrect.
4. Statement 2 is correct but, statement 1 is incorrect.

Answer: Option 4.

Solution: git is very clearly distributed right from the design. Whether or not git should be used to implement CVCS depends on the workflow implemented by the development team.

9] Which of the following statements is/are true for version control? [MSQ]

1. Version control should be started right from the start of a project.
2. Version control systems delete old versions of software after some time to avoid too much accumulation of old code.
3. Version control allows several people to work on the same project at the same time.
4. All of above

Answer: Option 1 and 3.

Solution: Version control should be maintained right from the beginning of the project. In general, deleteing the older versions of the code is considered a bad idea because it loses the history of development, and very little will be gained by deleting old code.

10] Consider the following statements and choose the correct option. [MCQ]

Statement 1: Load balancing refers to the placement of servers inside a data center to ensure equal distribution of weight.
Statement 2: A load balancing server will require large amounts of CPU and memory as it has to perform a lot of computations.

1. Both, statement 1 and 2 are correct.
2. Both, statement 1 and 2 are incorrect.
3. Statement 1 is correct but, statement 2 is incorrect.
4. Statement 2 is correct but, statement 1 is incorrect.

Answer: Option 2.

Solution: Load balancing in the context of application development is efficient dsitribution of requests from multiple application among the pool of servers. However, load balancers just forward requests to other servers, and do not see much load of their own.

11] Consider the following statements and choose the correct option. [MCQ]

Statement 1: Continuous delivery can be used to automate the process of generating nightly builds of software that can be tested by users.
Statement 2: Continuous delivery is an extension of continuous integration.

1. Both, statement 1 and 2 are correct.
2. Both, statement 1 and 2 are incorrect.
3. Statement 1 is correct but, statement 2 is incorrect.
4. Statement 2 is correct but, statement 1 is incorrect.

Answer: Option 1.

Solution: Statement 1 is one of the main purposes of continuous delivery. Because it distributes all code changes to a testing and/or production environment immediately after the build step, continuous delivery is an extension of continuous integration.

12] Which of the following is/are true for a platform? [MCQ]

1. A platform is a combination of hardware and software used for application development.
2. The platform is a collection of guidelines that allow programmers to create software applications using the appropriate technological stack.
3. A particular version of operating system is a part of software platform.
4. All of the above

Answer: Option 4

Solution: All the given options define platform for application development.