
Instructions

1. For questions containing multiple choice answers numbered as 1,2,3,4 select only one CORRECT answer
2. For questions containing multiple choice answers numbered as A,B,C,D select only one WRONG answer

Note: In case of doubt select the most suitable correct or wrong answer

1 Hybrid clouds properties and benefits
   1 Hybrid cloud combines different cloud services models
   2 Hybrid cloud combines company's legacy non-cloud infrastructure and cloud based services
   3 Hybrid cloud combines private cloud services and services run in community cloud
   4 Hybrid cloud provides secure virtualised environment so that sensitive data can be processed in public cloud

2 Federated cloud deployment model allows the following
   1 Combing resources and infrastructures from multiple cloud providers and creating single administration domain
   2 Identity federation of users and providers
   3 Combing resources and infrastructures from multiple cloud providers and creating single management domain
   4 Combing resources and infrastructures from multiple independent cloud providers into one application infrastructure managed by customer

3 Intercloud properties and benefits
   A Intercloud provides mechanisms for cloud based applications to interact at different control and management layers
   B Intercloud provides alternative to federated cloud model to allow cloud services to interact across multiple administration domains
   C Intercloud infrastructure can operate as single administration and management domain
   D Intercloud combines different cloud services models
When selecting cloud deployment model the following factors need to be considered:

A. Existence of company's data center
B. Availability of necessary IT staff skills
C. Sensitivity of information to be processed in cloud
D. Existence of wide customer base

Cloud Computing and Computer Grids: what are main differences and similarities:

A. Computer Grids provide a platform for running high performance cloud applications
B. Cloud Computing provides a platform for running Computer Grids applications
C. Computer Grid has been primarily designed as a collaborative environment for data intensive scientific applications
D. Computer Grids incorporate concept of Virtual Organisation (VO) for resources and jobs management

Cloud Computing and HPC (High Performance Computing):

1. Cloud Computing provides an appropriate platform for HPC
2. Cloud Computing incorporate scalable computing model that can be effectively used for processing large amount of data
3. HPC workloads can be easily scaled in clouds
4. HPC clusters cannot be built in clouds because cloud providers don't provide high-end VM to run HPC software
5. EPP applications can benefit from scalability and distributed resources in cloud

HPC with Amazon EC2:

A. Amazon EC2 provides specially configured VM instances to run tasks that require large amount of memory
B. Amazon AWS Cloud provides "cluster instances" to run HPC applications
C. Using HPC instances is aimed for improving performance of regular applications
D. Amazon EC2 provides HPC instances GPU based and high I/O
8 A medium size accountant company that serves tens of small and large clients considers using clouds to handle peak load that takes place during business and taxation reporting. What type cloud service and deployment model would be appropriate in this case.

1. The company should move all their IT infrastructure to IaaS cloud
2. The company should use SaaS based cloud applications for enterprise administration, accounting and bookkeeping
3. The company should start with the private cloud, develop own cloud based applications platform, and next migrate it to hybrid cloud
4. Cloud model is not suitable for this type of business because of two main reasons: (1) processing and storing data in cloud is not safe; and (2) license cost of software running on cloud is too high

9 Professional training company is considering benefits of using cloud platforms for running some training tasks and classes. What cloud services model is best suitable in this case?

1. Actually no cloud is needed but standard workplace VM can be deployed at the students' computers
2. The lab can be created on the BlackBoard platform provided as SaaS
3. Cloud IaaS is the best suitable. It allows creating required lab configuration and replicate it to a required number of workplaces
4. Use a PaaS cloud that provides required development platform and tools

10 Small or medium size company is developing a web based application (e.g. web shopping or social network web site). It needs to test it in a conditions close to real. How can it use clouds?

1. Deploying and running tests in cloud will be limited because it is difficult to monitor application's performance remotely.
2. The best approach would be to run website at companies premises and generate to this site in cloud
3. Deploying test environment in cloud will allow testing in condition close to real by employing a possibility to easy scale both workload and services scalability.
4. Using testing environment in cloud will require developers to change their business process, what may entail significant additional costs and will make using cloud not effective
How cloud can improve applications development and testing?

A  Deploying test environment in cloud will allow testing in condition close to real by employing a possibility to easily scale both workload and services scalability.

B  Deploying applications testbed in cloud will allow both small and big companies to improve the quality of products.

C

D  Demand for some applications can unpredictable surge. So, it is difficult to predict and testing in the cloud will actually not help.