Sample test 032
Question 1

• Which resources are typically provided by an Infrastructure as a Service cloud computing delivery model?
  – A. applications
  – B. virtual machines
  – C. virtual private networks
  – D. middleware software stacks
Question 2

• Which statement best describes the relationship between application, server, and client in a multi-tenancy environment?
  – A. Single instance of software running on a server and serves one client.
  – B. Single instance of software running on a server and serves multiple clients.
  – C. Multiple instances of software running on a server and serves multiple clients.
  – D. Multiple instances of software running on multiple servers and serves one client.
Question 3

Which concept aligns business and IT assets, helps provide flexible IT capacity, and provides realtime allocation of IT resources in line with demand from business processes?

- A. elasticity
- B. virtualization
- C. dynamic infrastructure
- D. automated management of resources
Question 4

• An enterprise needs highly controlled storage and access to their databases as well as managing the infrastructure for web front ends and other applications. They have a large existing IT infrastructure and they are continually expanding the capabilities. Which cloud computing model will satisfy all their current needs and enable them to reduce cost?
  – A. public cloud
  – B. hybrid cloud
  – C. private cloud
  – D. internal cloud
Question 5

• What are two important benefits of using cloud computing? (Choose two.)
  – A. Optimizes IT investments.
  – B. Deployment of single tenant application.
  – C. Enhanced Web V2.0 interfaces for user interactions.
  – D. Lower total cost of ownership and improved asset utilization.
  – E. Provides better availability than a standard computing environment.
Question 6

• What is one functionality of IBM Tivoli Service Automation Manager?
  – A. software discovery
  – B. business service monitoring
  – C. virtual server provisioning
  – D. out of the box cloud solution
A company is currently using IBM LotusLive and would like their mobile users to have access to the instant messaging feature. How can this be accomplished?

- A. Mobile users can install IBM LotusLive Engage on their mobile device.
- B. Mobile devices with a IBM Sametime Connect client can be configured to connect to the IBM LotusLive Sametime community.
- C. Supported client devices can be configured to use the IMAP IDLE protocol to support instant messaging with the IBM LotusLive servers.
- D. A Sametime gateway can be installed and configured to provide connectivity via the textmessaging service available on mobile devices.
Question 8

• When will cloud computing provide the most value?
  – A. A company has several thousands of documents that need to be indexed in many months.
  – B. A company has several hundreds of documents that need to be indexed in a few minutes.
  – C. A company has to process their payroll activities at the end of each pay period in batch mode.
  – D. A company has purchased additional hardware in order to process their payroll activities faster at the end of each pay period.
Question 9

- A customer is struggling with inconsistent software builds in the testing and staging environment. Which cloud attribute can help resolve the problem?
  - A. pervasiveness
  - B. elastic scaling
  - C. flexible pricing
  - D. automatic provisioning
A company needs to provide IT services to a worldwide customer base utilizing a diverse set of devices. Which attribute of cloud computing can help the company deliver such services?

- A. pervasiveness
- B. flexible pricing
- C. vertical scaling of application servers
- D. horizontal scaling of application servers
Question 11

• Which customer scenario is best suited to maximize the benefits gained from using a virtual private cloud?
  – A. A small start up business focused primarily on short term projects and has minimal security policies.
  – B. An enterprise whose IT infrastructure is under utilized on average and the system load is fairly consistent.
  – C. An enterprise that requires minimal security over their data and has a large existing infrastructure that is capable of handling future needs.
  – D. An enterprise that does not want to sacrifice security or make changes to their management practices but needs additional resources for test and development of new solutions.
Question 12

- A company wants to build a test environment to test software updates and new solutions. The environment should mirror the production environment and be secure and inaccessible from outside the company network. The company does not want to invest in infrastructure that may be idle for a significant amount of time. Which cloud computing model will satisfy all these requirements?
  - A. Public Cloud
  - B. Private Cloud
  - C. External Cloud
  - D. Virtual Private Cloud.
Question 13

- What advantage is there for an enterprise to adopt a virtual private cloud model?
  - A. Reduce costs by adopting a flexible pricing model for the entire operation.
  - B. Reduce infrastructure costs since all data centers will be managed in a third party cloud.
  - C. Manage sensitive data in a compliant and secure manner and benefit from flexible pricing models for select services or infrastructure.
  - D. Obtain maximum control over aspects such as security and performance since the entire infrastructure will be managed within the IT department.
A company is considering a cloud environment to improve the operating efficiency for their data and applications. The company is part of an industry where strict security and data privacy issues are of the highest importance. Which type of cloud would be a good choice?
- A. hybrid cloud
- B. public cloud
- C. private cloud
- D. governed cloud
Question 15

- Which two statements are true about the public cloud model? (Choose two.)
  - A. It meets security and auditing requirements for highly regulated industries.
  - B. Resources and infrastructure are managed and maintained by the enterprise IT operations staff.
  - C. It shifts the bulk of the costs from capital expenditures and IT infrastructure investment to an utility operating expense model.
  - D. It shifts the bulk of the costs from capital expenditures to creating a virtualized and elastic infrastructure within the enterprise data center.
  - E. Resources are dynamically provisioned on a self service basis from an off site third party provider who shares resources in a multi-tenanted infrastructure.
Question 16

A company would like to leverage cloud computing to provide advanced collaboration services (i.e. video, chat, and web conferences) for its employees but does not have the IT resources to deploy such an infrastructure. Which cloud computing model would best fit the company needs?

- A. Hybrid Cloud
- **B. Public Cloud**
- C. Private Cloud
- D. Virtual Private Cloud
Question 17

• A company has decided to leverage the web conferencing services provided by a cloud provider and to pay for those services as they are used. The cloud provider manages the infrastructure and any application upgrades. This is an example of what type of cloud delivery model?
  – A. Platform as a Service
  – B. Software as a Service
  – C. Application as a Service
  – D. Infrastructure as a Service
Question 18

• Which statement best describes the Software as a Service cloud delivery model?
  – A. A virtual machine provisioned and provided from the cloud which allows the customer to deploy custom applications.
  – B. A multi-tenant storage service provisioned from the cloud which allows the customer to leverage the cloud for storing software data.
  – C. A solution stack or set of middleware delivered to the client from the cloud which provides services for the design, development, and testing of industry aligned applications.
  – D. An application delivered to the client from the cloud which eliminates the need to install and run the application on the customer’s own computers and simplifying maintenance and support.
Question 19

• Which delivery model is an example of a cloud computing environment that provides users with a web-based e-mail service?
  – A. Software as a Service
  – B. Platform as a Service
  – C. Computing as a Service
  – D. Infrastructure as a Service
Question 20

• How can a company leverage the Platform as a Service cloud computing delivery model?
  – A. A company requires more processing power to perform its financial analysis calculations and acquires additional computational resources.
  – B. A company requires a customer relationship management solution and obtains an application that addresses their requirements from a cloud provider.
  – C. A company is running out of storage space to store a customer database and dynamically requests additional space via the cloud provider web services interface.
  – D. A company obtains an environment with a software stack from a cloud provider, develops a custom application, and makes that application available to its customers on the Internet.
Question 21

A cloud provider offers an environment for building applications that will run from the customer's environment. Which cloud computing delivery model are they using?

- A. Platform as a Service
- B. Software as a Service
- C. Development as a Service
- D. Infrastructure as a Service
Question 22

• Which statement is true about the Platform as a Service cloud computing delivery model?
  – A. It provides a virtual machine and storage so that computing platforms can be created.
  – B. It provides a runtime environment for applications and includes a set of basic services such as storage and databases.
  – C. It provides the entire infrastructure along with a completed application that is accessible using a web based front end.
  – D. It is required by the infrastructure as a service delivery model so that end user applications can be delivered on the cloud.
Question 23

- Which delivery model is an example of a cloud computing environment that provides users access to virtual machines?
  - A. Platform as a Service
  - B. Software as a Service
  - C. Application as a Service
  - D. Infrastructure as a Service
A company interested in cloud computing is looking for a provider who offers a set of basic services such as virtual server provisioning and on-demand storage that can be combined into a platform for deploying and running customized applications. What type of cloud computing model fits these requirements?

- A. Platform as a Service
- B. Software as a Service
- C. Application as a Service
- D. Infrastructure as a Service
Question 25

- Which business type provides Software as a Service?
  - A. Internet Service Provider
  - B. Platform Service Provider
  - C. Application Service Provider
  - D. Infrastructure Service Provider
Question 26

• What is true about an application service provider?
  – A. It offers Software as a Service.
  – B. It offers access to the Internet.
  – C. It offers metered service to the customer.
  – D. It offers a computer infrastructure service.
Question 27

• What is true about an application service provider?
  – A. It delivers Software as a Service.
  – B. It delivers Platform as a Service.
  – C. It delivers Infrastructure as a Service.
  – D. It delivers Communications as a Service.
Question 28

• What is grid computing?
  – A. It is distributed computing where autonomous computers perform independent tasks.
  – B. It is interconnected computing where a computing platform is delivered to consumers.
  – C. It is parallel and distributed computing where computer infrastructure is offered as a service.
  – D. It is parallel computing where autonomous computers act together to perform very large tasks.
Question 29

• What is true about grid computing?
  – A. Cloud computing is an example of grid computing.
  – B. Cluster computing is an example of grid computing.
  – C. Grid computing is a type of infrastructure as a service.
  – D. Grid computing can run in a cloud computing environment.
Question 30

- What is true about the tasks running on grid computing?
  - A. The tasks run on a single computer.
  - B. The tasks are small and independent.
  - C. The tasks are divided among the computers.
  - D. The tasks run on a computer using a peer-to-peer system.
Question 31

• What is utility computing?
  – A. It delivers computing resource as a metered service.
  – B. It is a service model where customers pay a flat rate for usage.
  – C. It is a computing model where computer resources are provided on-demand.
  – D. It is an organization that maintains the computer infrastructure for a public service.
Question 32

• What is true about utility computing and cloud computing?
  – A. Utility computing is not related to cloud computing.
  – B. Cloud computing can be delivered as utility computing.
  – C. Utility computing runs in a cloud computing environment.
  – D. Utility computing is the only billing model for cloud computing.
Question 33

• Which computing feature is related to utility computing?
  – A. metering
  – B. security
  – C. multi-tenancy
  – D. virtualization
Question 34

- What is one benefit of cloud computing?
  - A. Computer resources can be quickly provisioned.
  - B. A workload can quickly move to a cloud computing environment.
  - C. There is no operational cost for a cloud computing environment.
  - D. The resources can quickly move from one cloud environment to another.
Question 35

- What is one benefit of a cloud computing environment?
  - A. It improves server performance.
  - B. It minimizes network traffic to the virtual machines.
  - C. It automatically transforms physical servers into virtual machines.
  - D. It maximizes server utilization by implementing automated provisioning.
Question 36

- Which statement is true about the reliability of a cloud computing solution?
  - A. A public cloud is less reliable than a private cloud.
  - B. Cloud computing improves the reliability through the use of multiple sites.
  - C. A hybrid cloud strategy represents the best approach for a reliable cloud computing environment.
  - D. A cloud computing service can schedule a maintenance outage that affects the availability of their sources.
Question 37

Which statement is true about the security of the cloud computing environment?

- A. It is compromised because it is a shared environment.
- B. Multi-tenant applications are not able to run in a cloud environment.
- C. A public cloud provides the same level of security as a private cloud.
- D. Access to critical data is better controlled in a private cloud environment.
Question 38

• Which statement is true about the maintenance of a cloud computing environment?
  – A. In a Software as a Service (SaaS) environment, patches are automatically installed on the clients.
  – B. In a SaaS environment, customers do not need to worry about installing patches in the virtual instances.
  – C. In an Infrastructure as a Service (IaaS) environment, patches are automatically installed on the clients.
  – D. In an IaaS environment, customers do not need to worry about installing patches in the virtual instances.
Question 39

• Which statement is true about a cloud computing environment?
  – A. It cannot be used to host location based applications.
  – B. It enables users to access systems regardless of their location.
  – C. It introduces latency as the servers are geographically dispersed.
  – D. It can improve a web server response time by having servers closer to the end user.
Question 40

• What are two common areas of concern often expressed by customers when proposing a multi-tenancy software solution compared to a single-tenancy solution? (Choose two.)
  – A. data privacy
  – B. higher costs
  – C. greater network latency
  – D. complexity to customize solution
  – E. less efficient use of computing resources
Question 41

• What is an advantage of a multi-tenancy cloud environment over a single-tenancy environment?
  – A. cost savings
  – B. easy to customize
  – C. faster performance
  – D. higher data security
Question 42

• What is the role of virtualization in cloud computing?
  – A. It removes operating system inefficiencies.
  – B. It improves the performance of web applications.
  – C. It optimizes the utilization of computing resources.
  – D. It adds extra load to the underlying physical infrastructure and has no role in cloud computing.
How can IT resource consolidation and virtualization help companies deliver services?

- A. It reduces the network traffic.
- B. It scales applications better than traditional clustering of application servers.
- C. It allocates computing resources more efficiently and reduces maintenance costs.
- D. It creates more maintenance work but virtualization makes it easy to scale applications.
A company must perform a complex analysis for a client, and their computer systems do not have the computation capacity to perform this analysis. How can this analysis be completed quickly and cost effectively?

- A. Order new hardware to boost computational power.
- B. Consolidate the existing hardware to find required computational capacity.
- C. Virtualize existing hardware to extract efficiency and utilize the extra capacity.
- D. Temporarily access computational power on demand from a cloud service provider.
Question 45

- Which cloud computing feature allows for server consolidation resulting in increased asset utilization and decreased data center energy needs?
  - A. Automation
  - B. Governance
  - C. Provisioning
  - D. Virtualization
Question 46

- A company currently experiences 7 to 10 percent utilization of its development and test computing resources. The company would like to consolidate to reduce the number of total resources in their data center and decrease energy costs. Which feature of cloud computing allows resource consolidation?
  - A. Automation
  - B. Elasticity
  - C. Provisioning
  - D. Virtualization
A company operates data centers in two different regions. Energy costs for one of the data centers increases during the warmer, summer months. The company already uses server virtualization techniques in order to consolidate the total number of required resources. How might the company further reduce operating costs at this data center?

- A. The company can shut down the data center in the summer season.
- B. The company does not need to do anything because they are already using server virtualization techniques.
- C. The company can leverage provisioning to optimize the availability of their environments in the summer season.
- D. The company can further leverage virtualization to easily and quickly move as many assets from the data center in the warmer region to the data center in the cooler region during the summer season.
Question 48

- Which statement is true about cluster computing and cloud computing?
  - A. In cloud computing, computers work together; in cluster computing, computers work independently.
  - B. In cloud computing, resources are treated independently; in cluster computing, the resources are seen as a single system.
  - C. In cloud computing, resources are virtualized; in cluster computing, resources are running physically in a computer system.
  - D. In cloud computing, resources are not as reliable as in cluster computing because cluster computing has redundant nodes for high availability.
Question 49

Which statement is true about sharing resources in a cloud computing and cluster computing environments?

- A. File systems are not shared in cluster computing or cloud computing environments.
- B. File systems are normally shared in a cluster computing and cloud computing environment.
- C. File systems are normally shared in a cluster computing environment but not in cloud computing environment.
- D. File systems are normally shared in a cloud computing environment but not in a cluster computing environment.
Question 50

• Which statement is true about cloud computing and cluster computing?
  – A. A cluster computing environment can be deployed in a cloud computing environment.
  – B. A cloud computing environment can be deployed in a cluster computing environment.
  – C. A cluster computing environment cannot be deployed without a cloud computing environment.
  – D. A cloud computing environment cannot be deployed without a cluster computing environment.
Question 51

When implementing a cloud computing environment, which scenario should be considered first?

– A. An area where the approval process is complex.
– B. An area where the approval process can be automated.
– C. An area where most of the approval can be delegated.
– D. An area where there is no documented approval process.
Question 52

• How is a business approval process related to a cloud computing environment?
  – A. A cloud computing environment requires an expedited business approval process.
  – B. A business approval process is required to deploy a cloud computing environment.
  – C. A cloud computing environment can be implemented without a business approval process.
  – D. A business approval process must be documented before implementing a cloud computing environment.
Question 53

Why is a defined approval process important for a cloud computing implementation?
- A. It defines the access to a cloud computing resource.
- B. It defines the responsibilities for the cloud computing environment.
- C. It defines the authorization process for cloud computing provisioning.
- D. It defines the authorization process for a cloud computing implementation.
Question 54

• A company gathers, stores, manages, and protects data as part of its business. How can it create business value from the data?
  – A. Create a virtualized server infrastructure.
  – B. Create a virtualized application infrastructure.
  – C. Create a virtualized information infrastructure.
  – D. Create a virtualized end user / client infrastructure.
Question 55

In addition to resource virtualization and consolidation, which three options provide a complete set of dynamic infrastructure capabilities? (Choose three.)

- A. product integration
- B. automated provisioning
- C. network virtualization
- D. service standardization
- E. flexible infrastructure
- F. centralization of resources
Question 56

- In cloud computing, which term is used to describe the nature of IT infrastructure and allows dynamic scaling depending on the demand for resources?
  - A. elasticity
  - B. clustering
  - C. consolidation
  - D. virtualization
Question 57

- A company has peak customer demand for its IT services in the month of April. It has enough IT resources to handle off peak demand but not peak load. What is the best approach to handle this situation?
  - A. Outsource all of IT services to a cloud based provider.
  - B. Virtualize its servers and implement a cloud based system.
  - C. Utilize an external cloud service provider to handle the peak load.
  - D. Acquire additional IT resources and design the system to handle the peak load.
Question 58

A company that originally planned its web based IT system to support 10,000 users suddenly notices that there is a four times increase in demand. Assuming that the company has deployed its system in a true cloud environment, what are the incremental maintenance costs to adding new resources to this environment?

– A. Negligible.
– B. Twice its original costs.
– C. Three times its original costs.
– D. Four times its original costs of deployment.
Question 59

A company has implemented a cloud computing solution. After a request for the new environment is approved, the provisioning process is manually initiated by a system administrator. How can the company use automation to improve this process?

- A. By implementing an extension to the cloud environment.
- B. By sending an alert to an approver indicating that a request needs attention.
- C. By sending an alert to a system administrator indicating that an environment needs to be provisioned.
- D. By provisioning the requested environment after the request approval without the need for manual intervention.
Question 60

• What is the benefit of using automation techniques in conjunction with cloud computing?
  – A. Automation reduces human errors.
  – B. Automation allows for sharing of computer resources.
  – C. Automation reduces costs by increasing asset utilization.
  – D. Automation optimizes availability by maintaining configurations and managing changes to resources.
Question 61

• How does automation increase the effectiveness of an IT organization?
  – A. It reduces costs by increasing asset utilization.
  – B. It provides usage monitoring and cost allocation capabilities.
  – C. It reduces the manual intervention needed for deploying and managing IT services.
  – D. It optimizes availability by maintaining configurations and managing changes to resources.
Question 62

- What is the definition of provisioning as an automated process related to cloud computing?
  - A. It moves data from one cloud to another.
  - B. It provides server consolidation capability.
  - C. It adds security constraints to a cloud environment.
  - D. It handles computing resource management processes.
Question 63

• Application developers and testers are required to routinely setup complex multi-tiered application environments to complete their tasks. How can provisioning capabilities in a cloud computing solution improve setup efficiencies?
  – A. It reduces the complexity of the application environments.
  – B. It reduces the number of application environments to set up.
  – C. It allows the employees to reduce the number of managed servers.
  – D. It allows the employees to capture complex environments and set them up in a consistent manner.
Question 64

- Product support professionals repeatedly create complex application environments in order to debug problems reported by customers. How might provisioning in a cloud computing solution help the product support team's efficiency?
  - A. It helps the team identify bugs in the code.
  - B. It reduces the amount of computer hardware used by the team.
  - C. It reduces the number of environments the team must recreate.
  - D. It allows the team to rapidly deploy complex application environments.
Question 65

• What are two ways a public cloud helps customers reduce their IT costs? (Choose two.)
  
  – A. Flexible billing models enable customers to pay only for what they use.
  
  – B. Customers have access to the cloud services and infrastructure at anytime.
  
  – C. It is easier to obtain a software instance in a cloud computing environment.

  – D. It reduces the capital expenditures required for setting up the infrastructure.

  – E. It reduces the operating expenses by isolating the end users from the complexity of IT operations.
Question 66

What advantage do flexible pricing models provide to customers of a public cloud?

- A. They provide customers with unlimited bandwidth.
- B. They enable customers to pay only for what they use.
- C. They provide customers with unlimited storage in the cloud.
- D. They allow the customers to dynamically increase capacity without additional cost.
Question 67

- Which customer scenario best fits a deployment on a public cloud?
  - A. A customer whose IT infrastructure is underutilized.
  - B. A customer who deals with highly sensitive user information.
  - C. A customer who does not have the IT infrastructure to handle variable system load.
  - D. A customer who is not too concerned about security control over their data, and the system load is almost a constant at all times.
Question 68

• A private cloud helps businesses reduce their cost in what two ways? (Choose two.)
  – A. It reduces infrastructure cost by adopting virtualization techniques.
  – B. It reduces infrastructure cost by owning all of the computing resources.
  – C. It reduces operating costs by having maximum control over the data and infrastructure.
  – D. It reduces infrastructure cost by consolidating computing resources and distributed computing.
  – E. It reduces operating costs by having the internal IT department manage all the computing resources.
Question 69

- Which business scenario is best suited to maximize the benefits gained from using a private cloud?
  - A. An enterprise that manages sensitive data and the load on their systems is fairly consistent.
  - B. An enterprise that is focused primarily on short term projects, and the load on their systems is highly unpredictable.
  - C. An enterprise that is not too concerned about control over their data, and the load on their systems is almost a constant at all times.
  - D. An enterprise that manages sensitive data requiring maximum control and does not have enough infrastructure capacity to handle variable load.
Question 70

- What is an advantage of building a private cloud infrastructure?
  - A. A private cloud enables a business to reduce operating costs by having maximum control over the data and infrastructure.
  - B. A private cloud enables a business to reduce operating costs by using their own IT department to manage computing resources.
  - C. An enterprise can reduce the cost from capital expenditures and IT infrastructure investment to an utility operating expense model.
  - D. An enterprise can consolidate hardware, storage, and network by virtualizing resources to be more flexible, dynamic, and meet on demand requirements.
Question 71

• Which scenario best illustrates the benefits of using a hybrid cloud?
  – A. An enterprise whose IT infrastructure is underutilized on average, and the system load is fairly consistent.
  – B. A small start up business that is focused primarily on short term projects, and the system load is highly unpredictable.
  – C. An enterprise that is not too concerned about control over their data and has a large existing infrastructure that is capable of handling future needs.
  – D. An enterprise that needs highly controlled storage and access to their data and that has a large existing infrastructure but needs additional resources for test and development of new solutions.
Question 72

What are two advantages of adopting a hybrid cloud model for an enterprise? (Choose two.)

- A. It can reduce their infrastructure cost since all their data centers will be managed in a third party cloud.
- B. It can pool their existing infrastructure to be more flexible and increase their capacity for short term needs.
- C. It can reduce their cost drastically since they will be adopting a flexible pricing model for their entire operations.
- D. It can manage sensitive data in a compliant and secure manner, and benefit from flexible pricing models for select services or infrastructure.
- E. It can have maximum control over aspects such as security and performance since the entire infrastructure will be managed within their own IT department.
Question 73

- What are two traits of a cloud computing architecture? (Choose two.)
  - A. single tiered
  - B. not scalable
  - C. on-demand access to resources
  - D. internet/intranet accessible server
  - E. client and server run in the same physical environment
Question 74

• What is a common design element often found in cloud architectures?
  – A. single tiered
  – B. terminal emulators
  – C. synchronous web services
  – D. asynchronous web services
Question 75

• What is a common trait of cloud architectures?
  – A. It dictates monolithic application designs.
  – B. It must use publicly accessible computing resources.
  – C. A fixed set of computing resources is pre-allocated to each application.
  – D. While in operation the application automatically scales up or down based on resource needs.
Question 76

Which billing model allows companies to have a predetermined and recurring costs for services used in a cloud environment?

- A. utility
- B. metered
- C. subscription
- D. resource based
Question 77

- Which billing model is based on the packaging of computing resources (i.e. computation and storage) and the amount of those resources used?
  - A. metered
  - B. recurring
  - C. Subscription
  - D. per user based
A company that provides gift giving advice has leveraged collaborative services in a cloud computing environment to provide online chat between its employees and customers. As the holiday season approaches, the company is able to easily increase the resources needed in the cloud environment. When the season has ended, the company is able to reduce the resource usage. This allows the company to effectively manage the required computational resources and thereby reduce costs. What type of cloud computing billing model is this company using?

- A. utility
- B. monthly
- C. recurring
- D. subscription
Question 79

• What are the components of a cloud computing environment?
  – A. application, platform, infrastructure
  – B. client, application, session, network, data
  – C. application, presentation, transport, network, data
  – D. client, application, platform, infrastructure, server
Question 80

Which two options are cloud computing architectural layers? (Choose two.)

- A. Data
- B. Network
- C. Session
- D. Platform
- E. Application
Question 81

• Software as a Service is considered to be included in which cloud computing layer?
  – A. Data
  – B. Client
  – C. Application
  – D. Infrastructure
Question 82

What is used to logically assign and separate physical resources such as memory and CPU in a cloud computing model?

- A. bios
- B. a hypervisor
- C. a load balancer
- D. a blade chassis
Question 83

Which statement is true about a bare metal hypervisor?

- A. It can only be hosted on an existing operating system.
- B. It requires a separate license for the native operating system.
- C. It has minimum functionality to support only one type of operating system.
- D. It runs directly on server hardware to provide virtual machines with timesharing resources.
Question 84

• What type of hypervisor provides the highest efficiency and performance?
  – A. utility based
  – B. storage based
  – C. software based
  – D. firmware based
Question 85

- What is a common mechanism of communications among virtual machines running in a cloud environment?
  - A. A public IP address for each instance that is connected to a virtual private bridge.
  - B. A private IP address for each instance that is connected to a virtual private bridge.
  - C. A public IP address for each instance that attaches to the OS software ethernet bridge.
  - D. A private IP address for each instance that attaches to the OS software ethernet bridge.
Question 86

• What is a characteristic of a guest operating system whose network is configured as a Virtual NAT device?
  – A. The guest operating system gets a private IP and cannot talk to other guest operating systems.
  – B. The guest operating system gets a public IP and can talk to the internet that the host machine can access.
  – C. The guest operating system gets a public IP, can talk to other guest operating systems, and can access the Internet that the host machine can access.
  – D. The guest operating system gets a private IP, can talk to other guest operating systems, and can access the Internet that the host machine can access.
Question 87

• What are two common concerns in a cloud environment? (Choose two.)
  – A. Inability to use proxy servers and load balancers.
  – B. Not enough computing capacity during peak usage times.
  – C. Illegal access to private data stored by applications in the cloud.
  – D. Running out of storage space and network bandwidth at peak usage times.
  – E. If two guest instances are running on the same host or on different hosts connected to the same physical ethernet, they should not be able to read or modify each other's network traffic.
Question 88

• What are some challenges that existing data centers face as they move toward supporting cloud computing?
  – A. Acquiring new servers to support virtualization.
  – B. Increased IT labor costs to manage the cloud environment.
  – C. Greater energy consumption for the same load of applications.
  – D. Storage capacity, data protection, and storage provisioning as instances accumulate and scale up.
Question 89

Which approach is generally considered the easiest when beginning to adopt a cloud computing deployment model?

- A. Trying it out in a testing environment.
- B. Trying it out in a staging environment.
- C. Trying it out at the beginning of a new project.
- D. Trying it out directly in a production environment.
Question 90

• When building data center clouds, certain network performance characteristics should be closely evaluated so that users are not negatively impacted. What are the two most important characteristics that should be examined? (Choose two.)

  – A. network latency
  – B. network security
  – C. network packet loss rate
  – D. network buffer overflow rate
  – E. network routing information loss
Question 91

• Data center clouds are formed by connecting two or more data center cloud networks over wide area network. When building such data center clouds, which component is mainly responsible for increasing the network latency?
  – A. network servers
  – B. network clients
  – C. network interfaces
  – D. network routing protocols
Question 92

When building data center clouds it is important to plan the network to be as flat as possible in order to reduce latency and packet loss. What does the term "flat" mean?

- A. The network should not connect more than a certain number of users (reduce the number of users).
- B. The network should not connect more than a certain number of servers (reduce the number of servers).
- C. The network should not connect more than two clouds together (reduce the number of clouds connected).
- D. The network should not include many layers of devices to create connectivity (reduce the number of switches/routers).
Question 93

- A large infrastructure as a service provider wants to allow users to provision new server capacity from a variety of different interface technologies. Which web technology should the service provider use to build an interface that users can leverage?
  - A. The company should provide an HTTP REST API.
  - B. The company should provide an XML RPC service.
  - C. The company should provide a command line interface.
  - D. The company should provide a proprietary remote API.
Question 94

• How do users access Software as a Service cloud services?
  – A. thick client
  – B. local client
  – C. web browser
  – D. command line
Question 95

• Cloud service providers typically provide web based management consoles that provide users insight on the state of cloud services. What is one technology used in client side browser code that queries back end systems for data from the cloud services?
  – A. PHP
  – **B. AJAX**
  – C. HTML
  – D. XHTML
A cloud service provider wants to provide storage as a service to users. The company is based in New York and operates its data center there. What should the company do in order to ensure high availability for the storage services they provide?

- A. Backup user data on removable media for off-site storage.
- B. Build a data center in Chicago and backup user data there.
- C. Build a data center in New York and backup user data there.
- D. Instruct users to keep their own backups for the information they store.
Question 97

• A company delivers Software as a Service that allows users to fill out and submit tax forms online. What should the company do to accommodate the spike in demand on the date when the tax forms are due?
  – A. Build the system according to peak demand requirements.
  – B. Build the system with high-end hardware to ensure system performance.
  – C. Monitor the system and lease additional hardware during the peak tax season.
  – D. Design a robust load balancing architecture that monitors application performance and routes requests to application instances appropriately.
Question 98

• Four different companies provide Storage as a Service capabilities: Company A stores user data in its primary data center in New York and replicates the data to a backup data center also in New York. Company B stores user data in its primary data center in Chicago and replicates it to a data center in Atlanta. Company C stores user data in its primary data center in Los Angeles and stores replicas in the same data center. Company D stores user data in its primary data center in St Louis and does not replicate the data. Which company is likely to provide the highest availability?

  – A. Company A
  – B. Company B
  – C. Company C
  – D. Company D
Question 99

• Which three input parameters are required when creating an instance of the IBM Smart Cloud for Development and Test? (Choose three.)
  - A. CPU
  - B. MIPS
  - C. Location
  - D. CPU Brand
  - E. Storage Size
  - F. Operating System
Question 100

- Which licensing model is supported for the IBM Smart Business Development and Test Cloud?
  - A. Utility
  - B. Credit Card
  - C. Monthly Billing
  - D. Bring Your Own
Question 101

• What is the name of the public cloud offering from IBM Rational?
  – A. IBM Rational Monthly SaaS
  – B. IBM Rational Public Cloud
  – C. IBM Smart Business Development and Test on the IBM Cloud
  – D. IBM Rational Collaborative Application Lifecycle Management Cloud
Question 102

• Which Tivoli product migrates an operating system replica from RedHat KVM to VMware?
  – A. IBM Tivoli Storage Manager
  – B. IBM Tivoli Business Service Manager
  – C. IBM Tivoli for Operating System Deployment
  – D. IBM Tivoli Provisioning Manager for Images
Question 103

- What is the main purpose of an IBM CloudBurst solution?
  - A. It provides an out of the box cloud solution.
  - B. It clones WebSphere topologies across an enterprise.
  - C. It provides the software base to build a cloud solution.
  - D. It provides a feature to deploy IBM WebSphere Application Servers topologies in a cloud environment.
Question 104

• Which IBM Cloud solution is differentiated by its focus on automating existing processes to increase efficiencies in enterprise data centers?
  – A. IBM CloudBurst
  – B. IBM Smart Business Storage Cloud
  – C. IBM Cloud Services Lifecycle Management
  – D. IBM Service Management Center for Cloud Computing
Question 105

• What would be used to satisfy a requirement for an on-premises cloud installation?
  – A. IBM CloudBurst
  – B. IBM CloudBurst for Development and Test
  – C. The IBM Smart Business Development and Test Cloud
  – D. The IBM Smart Business Development and Test on the IBM Cloud
A client wants to automate the on site design, deployment, and management of services such as middleware containers, applications, hardware, and networks from existing assets for development, test, and production. Which option would fit the client's requirement?

- A. IBM WebSphere CloudBurst Appliance
- B. IBM Tivoli Service Automation Manager
- C. IBM Smart Business Development and Test Cloud
- D. IBM Service Management Center for Cloud Computing
A smaller independent web software development company with minimal IT staff wants a "cloud in a box" that can reuse assets between development and test depending on their own internal development cycle needs. However, they want to keep the code in-house at all times. Which option should the company choose?

- A. IBM CloudBurst
- B. IBM Implementation Services for Cloud Computing
- C. IBM Service Management Center for Cloud Computing
- D. IBM Server and Application Provisioning and Release Management
Question 108

• Which product helps manage software license and compliance risk?
  – A. IBM CloudBurst
  – B. IBM Tivoli Asset Management for IT
  – C. IBM Tivoli Service Automation Manager
  – D. IBM Service Management Center for Cloud Computing
A small business is experiencing a significant increase in their data and it is putting a strain on their infrastructure. They are concerned about their ability to meet the demand without significant capital expenditures so they are considering a low cost cloud solution. They want a reliable, low cost, full function data server that delivers the highest OLTP performance, near hands free administration, and high availability solutions. Which IBM database server offering is best suited for this client scenario?

- A. IBM Lotus Domino Server
- B. IBM InfoSphere DataStage
- C. IBM Informix Dynamic Server
- D. IBM InfoSphere Information Server
Question 110

What benefits can be achieved by a small business adopting a cloud based solution with IBM Informix Dynamic Server?

- A. It will enable reporting, analysis, dash boarding, and score carding on a single service oriented architecture.
- B. It will provide a low cost, full function data server that delivers the highest OLTP performance and near hands free administration.
- C. It will enable capture and delivery of changed data from heterogeneous systems to support warehousing, MDM, SOA, e-Business, and application migrations.
- D. It will enable data integration from disparate sources and deliver trusted and complete information at the time it is required and in the format it is needed.
Question 111

A large organization is considering a data integration project that will last six months. They are looking for a solution that will enable them to derive value from the complex information spread across their systems. The solution should profile, cleanse, and integrate the data across diverse sources (structured, unstructured, mainframe, and application sources) to deliver trusted information. Which IBM database server offering is best suited for this client scenario?

- A. IBM Lotus Domino Server
- B. IBM DB2 Enterprise Server
- C. IBM Informix Dynamic Server
- D. IBM InfoSphere Information Server
An insurance company wants to build a business analytics solution in the cloud. They need a comprehensive view across claims, customer service, the workforce, and performance management in order to make quick decisions. The solution should help them bring together all of their data assets across the organization via reports, analysis, scorecards, plans, and budgets. This will enable them to manage conflicting priorities, tackle compliance issues quickly, maximize operational efficiency, and manage growth and product offerings. Which IBM offering is best suited for this client scenario?

- A. IBM FileNet Content Manager
- B. IBM InfoSphere Information Server
- C. IBM InfoSphere Replication Server
- D. IBM Cognos 8 Business Intelligence
Question 113

• What benefit can a retail organization gain by adopting a cloud based solution with IBM Cognos 8 Business Intelligence?
  
  – A. It will provide a low cost, full function data server that delivers the highest OLTP performance and near hands free administration.
  
  – B. It will enable them to capture and deliver changed data from heterogeneous systems to support warehousing, MDM, SOA, e-Business, and application migrations.
  
  – C. It will enable them to use reports, analysis, dashboards, and scorecards to identify and analyze trends and to respond to consumer buying needs and behaviors.
  
  – D. It will provide a powerful document management system with ready to use workflow and process capabilities to automate and drive their content related tasks and activities.
The IBM Smart Analytics System is an integrated platform that provides broad analytics capabilities on a powerful warehouse foundation with IBM server and storage. With hardware and software deeply integrated and optimized, IBM Smart Analytics System provides a single point of support for end to end analytics solutions. The system is designed to ensure quick implementation with rapid delivery of value. Which business scenario is best suited to maximize the benefits gained from using the IBM Smart Analytics System?

- A. A small telecommunications company looking for a data server solution in the public cloud to deliver performance across multiple workloads.
- B. A government agency looking for a powerful document management system with ready to use workflow and process capabilities to automate their content related tasks.
- C. A retail chain that currently has a data warehouse implemented in a virtual private cloud and is looking to add predictive capabilities to uncover consumer buying trends.
- D. A health insurance company looking to build a private cloud with predictive capabilities in order to provide insight on plan members and therefore reducing risk and improving efficiency.
A company would like to perform a product launch virtually in order to reach a larger audience and save costs. In addition to web conference services, the company is looking for automated e-mail announcements, registration management, and summary/reports through multiple browsers and platforms. Which IBM offering can meet the needs of this company?

- A. IBM LotusLive Events
- B. IBM Lotus Connections
- C. IBM Lotus Sametime Meetings
- D. IBM Smart Business Cloud Conferences
Question 116

A company with less than 50 employees is looking for a web based e-mail service that provides essential messaging and calendaring capabilities. They have a limited budget and cannot afford a hosted e-mail solution. Which IBM cloud services would best meet their needs without having to hire IT staff to manage and maintain the infrastructure?

- A. IBM Lotus Notes
- B. IBM LotusLive iNotes
- C. IBM LotusLive Web E-mail
- D. IBM LotusLive Connections
In order to save time and reduce travel costs, a company is looking for a way to host virtual customer meetings. Features such as video casting, desktop sharing, participant rosters, and polling are important. Because the goal is to reduce cost, the company does not want to incur the expense of deploying and managing an on-site infrastructure but would like to leverage the services offered by the cloud. Which IBM offering would best meet their needs?

- A. IBM Lotus Sametime
- B. IBM LotusLive Meetings
- C. IBM LotusLive Connections
- D. IBM Lotus Web Conferences
Question 118

Which statement accurately describes how mobile devices are supported by the IBM LotusLive iNotes cloud offering?

- A. E-mail can be pushed to devices using SMTP.
- B. E-mail can be accessed using the SOAP interface.
- C. E-mail can be pushed to devices using IMAP IDLE.
- D. E-mail can be pushed to devices using POP3 interfaces.
Question 119

• Which offering supports sharing files and participating in web meetings from a smartphone device?
  – A. IBM Storage Cloud
  – B. IBM LotusLive Mobile
  – C. IBM Lotus Connections
  – D. IBM Smart Business Cloud
Question 120

Which three products are built on the IBM Rational Jazz platform? (Choose three.)

- A. IBM Rational ClearCase
- B. IBM Rational Team Concert
- C. IBM Rational Requisite Pro
- D. IBM Rational Quality Manager
- E. IBM Rational Software Architect
- F. IBM Rational Requirements Composer
Question 121

• Which two architectural features make the IBM Rational Jazz platform well suited for the IBM Smart Business Development and Test Cloud? (Choose two.)
  – A. TCP/IP
  – B. SOAP Services
  – C. Web User Interfaces
  – D. RESTful web services
  – E. Eclipse Modeling Framework
Question 122

• Which three tools are included in the IBM Rational Jazz Collaborative Application Lifecycle Management (C/ALM) solution? (Choose three.)
  – A. Rational ClearQuest
  – B. Rational Team Concert
  – C. Rational Quality Manager
  – D. Rational Software Modeler
  – E. Rational Software Architect
  – F. Rational Requirements Manager
Question 123

Which IBM offering evaluates, plans, designs, and implements a dynamically scalable virtualized development and testing private cloud environment?

- A. IBM Tivoli Provisioning Manager
- B. IBM WebSphere Cloudburst Appliance
- C. IBM Tivoli Service Automation Manager
- D. IBM Smart Business Development and Test Cloud
Question 124

• What are two advantages of using the IBM Smart Business Development and Test Cloud? (Choose two.)
  – A. No licensed software required.
  – B. Reduces short term software costs.
  – C. Requires 35 to 45 percent less training than in house development.
  – D. Improves quality through more accurate configurations and enhanced modeling.
  – E. Assists in reducing capital and licensing expenses as much as 50 to 75 percent using virtualized resources.
Question 125

- The IBM Smart Business Development and Test Cloud is used to evaluate, plan, design, and implement what type of environment?
  - A. A static runtime cloud environment.
  - B. A static development and testing cloud environment.
  - C. A dynamically scalable virtualized runtime cloud environment.
  - D. A dynamically scalable virtualized development and testing cloud environment.
Question 126

- Which IBM products are included in the IBM Rational Automation Framework for WebSphere?
  - A. IBM Rational BuildForge, IBM WebSphere CloudBurst Appliance
  - B. IBM WebSphere Integration Developer, IBM Rational BuildForge
  - C. IBM Rational Team Concert, IBM WebSphere CloudBurst Appliance
  - D. IBM WebSphere Application Developer, IBM Rational Team Concert
Question 127

What key challenge does IBM Rational Automation Framework for WebSphere help solve?

- A. It helps automate key line of business processes.
- B. It provides an automated framework for writing cloud-based applications.
- C. It automates the error prone manual application environment build process.
- D. It provides an automated workflow engine for IBM WebSphere Process Server.
Question 128

What is one advantage of adding IBM Rational BuildForge to the IBM WebSphere CloudBurst Appliance (WCA) in the IBM Rational Automation Framework offering?

- A. It allows the architect to model complex topologies using WCA.
- B. It allows geographically distributed work forces to utilize higher levels of collaboration.
- C. It creates higher quality applications by more tightly integrating IBM Rational BuildForge and WCA.
- D. It allows the application to become more loosely coupled from the WCA pattern by allowing IBM Rational BuildForge to handle application building.
Question 129

• How can a running application called billing be found in a 200 server virtual environment?
  – A. Use IBM Rational Asset Manager.
  – B. Look at the hypervisor management console.
  – C. Use IBM Tivoli Application Dependency Discovery Manager.
  – D. Request an application report from IBM Tivoli Usage and Accounting Manager.
Question 130

- How can resources used by an application running in a shared virtual environment be measured?
  - A. Use the hypervisor management console.
  - B. Each machine receives equal resources in the environment.
  - C. Use IBM Tivoli Monitoring to calculate the usage based on CPU utilization.
  - D. Use IBM Tivoli Usage and Accounting Manager to collect the metrics for the resources and produce report based on the application.
Question 131

- What are the common set of technologies used to create a manageable cloud environment?
  - A. A hypervisor and a hypervisor manager like Virtual Center or VMControl.
  - B. A hypervisor, a hypervisor manager, automated provisioning, and monitoring.
  - C. A hypervisor, a hypervisor manager, a self service portal, automated provisioning, and monitoring.
  - D. A hypervisor, a hypervisor manager, self service portal, and an automated provisioning tool like IBM Tivoli Provisioning Manager.
Question 132

• What is IBM WebSphere Application Server Hypervisor Edition?
  – A. A bare metal hypervisor platform built by IBM.
  – B. A hypervisor platform built by IBM that comes with IBM WebSphere Application Server Network Deployment.
  – C. A single virtual image that contains IBM WebSphere Application Server and IBM Tivoli Provisioning Manager.
  – D. A single virtual image that contains an operating system, the IBM HTTP Server, and the IBM WebSphere Application Server.
Question 133

- Development and test teams spend a lot of time constructing and deploying WebSphere application environments and their computer resources are heavily under utilized. Which two solutions can decrease time spent building and deploying environments while increasing asset utilization? (Choose two.)
  - A. IBM WebSphere MQ
  - B. IBM WebSphere Application Server
  - C. IBM WebSphere DataPower Appliance
  - D. IBM WebSphere CloudBurst Appliance
  - E. IBM WebSphere Application Server Hypervisor Edition
Question 134

Which virtualization standard does the WebSphere Application Server Hypervisor Edition use?
- A. Common Image Format
- B. Open Virtual Appliance
- C. Open Virtualization Format
- D. Interoperable Image Format
Question 135

What is one functionality of IBM Tivoli Provisioning Manager?

- A. It schedules data center resources.
- B. It provides provisioning for all network switches.
- C. It activates and installs appropriate software images.
- D. It provides the capability to reserve hardware resources.
Question 136

- What is the difference between an IBM Tivoli Provisioning Manager (TPM) workflow and a business workflow?
  - A. A business workflow is needed to operate in a TPM environment.
  - B. TPM requires multiple reviewers and approvers to execute the workflow.
  - C. TPM workflow is used to automate business decision workflow processes.
  - D. TPM workflow is used to automate the installation, configuration, and operation of a data center resource.
Question 137

• How are custom devices supported using IBM Tivoli Provisioning Manager (TPM)?
  – A. Implement a TPM device driver to support the custom device.
  – B. Use industry standard commands to interact with the device.
  – C. Open the TPM product code and insert the device support logic into TPM code base.
  – D. Use a logical device operation which automatically selects the most recent driver for all devices.
Question 138

• Which functionality is provided by an IBM Security Federated Identity Manager deployment in a cloud provider environment?
  – A. Access control to cloud resources.
  – **B. Federated single sign on to cloud resources.**
  – C. Support for custom authentication to cloud resources.
  – D. Compliance enforcement for access to cloud resources.
Question 139

• What is the value of IBM Security Information and Event Manager in a cloud provider environment?
  – A. Out of the box SOX compliance.
  – B. Management of cloud subscriber log files.
  – C. Desktop compliance enforcement for cloud users.
  – D. Out of the box reports for privileged user management.
Question 140

• What functionality is provided by the IBM Security Network Intrusion Prevention System Virtual Appliance for a cloud environment?
  – A. antivirus support
  – B. network level IDS/IPS
  – C. host level IDS/IPS and anti-virus support
  – D. host and network level intrusion detection and prevention
Question 141

What value does IBM Tivoli Storage Productivity Center provide for administering cloud services environments?

- A. It delivers cloud charge back and billing services.
- B. It provides a client portal for provisioning of storage.
- C. It manages data into storage tiers enabling multi-tenancy of data.
- D. It provides end to end management of heterogeneous storage environments.
Question 142

• What is the IBM Smart Business Storage Cloud?
  – A. IBM's storage cloud offering based on Scale Out NAS technology.
  – B. IBM's storage cloud offering provides a fixed block of storage to cloud applications.
  – C. IBM's storage cloud offering that dynamically provisions block storage to cloud applications.
  – D. IBM's storage cloud offering that maps business applications to specific storage devices in the cloud.
Question 143

Which statement best describes the IBM Smart Business Storage Cloud offering?

- A. The performance of the IBM Storage Cloud is limited only by the performance of its fastest disk.
- B. Automated data tiering and information life cycle management is available in the IBM Storage Cloud.
- C. The IBM Storage Cloud offers extreme performance and scalability and supports an unlimited storage under a single global namespace.
- D. The performance of backups and file system scanning of the IBM Storage Cloud degrades significantly for very large systems due to long file system scan times.