Oracle

Exam 1z0-574

Oracle IT Architecture Essentials

Version: 6.0

[Total Questions: 176]

Question No : 1

Which of the following are ORA Engineering logical categories?

A. Integrated Development Environment
B. Quality Manager
C. Asset Manager
D. Monitoring and Management

Answer: A,B

Explanation: The Engineering logical view shows the logical components of the Engineering environment and
show how they are connected to each other. T
The primary logical categories as shown are:
*Modeler
*Integrated Development Environment (IDE)
*Quality Manager
*Deployment Manager
*Metadata Repository
*Asset Repository

Reference: Oracle Reference Architecture, Software Engineering, Release 3.0, Engineering Logical View

Question No : 2

Which of the following options best describes the concept of data-driven testing?

A. Data-driven testing is a strategy used to perform load testing.
B. Data-driven testing is used to perform functional tests by iterating through data sets in a databank.
C. Data-driven testing uses a single predefined data set to perform repeated testing.
D. Data-driven testing uses database triggers to initiate and run test cases.

Answer: B

Explanation: One of the best ways to perform functional testing is through data-driven testing, in
which a databank is created to cover the various functional use cases and is used to
drive the testing. This requires the ability to iterate through a list of data sets in the

databank, substitute them for the input values, and run the tests.

Reference: Oracle Reference Architecture, Software Engineering, Release 3.0, Data driven testing

Question No : 3

As part of a company-wide IT Initiative to simplify and rationalize the technology and products used you have been tasked with defining an Enterprise Architecture. The Enterprise Architecture will be used to communicate the desired future state where redundant, deprecated, and undesired technology and products have been eliminated. Oracle products will be included. In the Enterprise Architecture, it will be products from other vendors, including products that directly compete with Oracle products.

Which option best describes how IT Strategies from Oracle (ITSO) material can be used while creating the Enterprise Architecture?

A. The ITSO material cannot be used because ITSO applies to Oracle products only.
B. The ITSO material can be used without modification because it has no Oracle product dependencies.
C. The ITSO material can be used as reference material but will require customization to reflect specific products selected by the company.
D. The Oracle Reference Architecture component of ITSO can be readily applied, but the Rest of ITSO cannot, because of product dependencies.
E. The Oracle Reference Architecture component of ITSO cannot be applied due to pre dependencies, but the rest of ITSO can be applied.
F. The ITSO material is not applicable to rationalization of IT asset

Answer: C
Explanation: IT Strategies from Oracle (ITSO) is a series of documentation and supporting collateral
designed to enable organizations to develop an architecture-centric approach to enterprise-class IT initiatives. ITSO presents successful technology strategies and solution designs by defining universally adopted architecture concepts, principles, guidelines, standards, and patterns.

ITSO is made up of three primary elements:
* Oracle Reference Architecture (ORA) defines a detailed and consistent architecture for developing and integrating solutions based on Oracle

technologies. The reference architecture offers architecture principles and guidance based on recommendations from technical experts across Oracle. It covers a broad spectrum of concerns pertaining to technology architecture, including middleware, database, hardware, processes, and services.

* Enterprise Technology Strategies (ETS) offer valuable guidance on the adoption of horizontal technologies for the enterprise. They explain how to successfully execute on a strategy by addressing concerns pertaining to architecture, technology, engineering, strategy, and governance. An organization can use this material to measure their maturity, develop their strategy, and achieve greater levels of success and adoption. In addition, each ETS extends the Oracle Reference Architecture by adding the unique capabilities and components provided by that particular technology. It offers a horizontal technology-based perspective of ORA.

* Enterprise Solution Designs (ESD) are industry specific solution perspectives based on ORA. They define the high level business processes and functions, and the software capabilities in an underlying technology infrastructure that are required to build enterprise-wide industry solutions. ESDs also map the relevant application and technology products against solutions to illustrate how capabilities in Oracle's complete integrated stack can best meet the business, technical and quality of service requirements within a particular industry.

Reference: IT Strategies from Oracle, An Overview, Release 3.0

Question No : 4

The three common goals of Information security are known as the CIA triad. CIA stands for:

A. Confidentiality, Integrity and Auditing
B. Confidentiality, Integrity and Availability
C. Confidentiality, Integrity and Access Control
D. Confidentiality, Integrity and Authentication
E. Confidentiality, Integrity and Authorization

Answer: B

Explanation: For over twenty years, information security has held confidentiality, integrity and availability (known as the CIA triad) to be the core principles of information security.

There is continuous debate about extending this classic trio.

Note:
Confidentiality is the term used to prevent the disclosure of information to unauthorized individuals or systems.
In information security, integrity means that data cannot be modified undetectably.
For any information system to serve its purpose, the information must be available when it is needed.

Question No : 5

Which statements best describe how architecture principles are used within the Oracle Reference Architecture (ORA)?

A. The architecture principles for Oracle products are identified whenever an Oracle product incorporated into the architecture.
B. ORA uses multiple architecturalviews where each view has its own architecture principles.
C. ORA documents describe the architectural principles upon which the architecture is based.
D. Architecture principles provide recommendations (based on industry best practices) that should be followed.
E. Architecture principles are rules that must be followedin order to comply with the documented architecture.

Answer: C
Explanation: The purpose of ORA is to provide a reference architecture for designing, building, and
integrating solutions based on modern technology from Oracle and other vendors. The reference architecture offers architecture principles and guidance based on recommendations from Oracle product development architects and field experts. Information provided by ORA gives architects an understanding of how to design solutions for the Oracle environment and best leverage its capabilities.

Note:Oracle Reference Architecture (ORA) defines a detailed and consistent architecture for developing and integrating solutions based on Oracle technologies. The reference architecture offers architecture principles and guidance based on recommendations from technical experts across Oracle. It covers a broad spectrum of concerns pertaining to technology architecture,

including middleware, database, hardware, processes, and services.

Reference: IT Strategies from Oracle, An Overview, Release 3.0

Question No : 6

Which statement best describes the relationship between a SOA Service and service Infrastructure?

A. Service infrastructure is a primary part of an SOA Service.
B. Service Infrastructure exposes the Service Interface and may satisfy some capabilities of the Service Implementation.
C. Service infrastructure fulfills the Service Contract.
D. A SOA Service depends on the service infrastructure to satisfy some required capabilities.
E. A SOA Service uses the service infrastructure to generate the Service Interface.

Answer: B

Explanation: The Service Infrastructure side typically provides the Service enablement capabilities
for the implementation. These capabilities may include, exposing the interface as a Web Service, handling SLA enforcement, security, data formatting, and others. Service infrastructure should be utilized when possible, as it reduces the burden on Service providers, from an implementation standpoint.

Reference: Oracle Reference Architecture,SOA Foundation, Release 3.1

Question No : 7

Which WebCenter product Improves efficiency and productivity by enabling users to connect with others, regardless of their location, via web and voice conferencing, instant messaging, presence, and chat rooms?

A. Oracle WebCenter Intelligent Collaboration
B. Oracle WebCenter Anywhere

C. Oracle WebCenter Real-Time Collaboration
D. Oracle WebCenter Spaces

Answer: C

Explanation: Oracle WebCenter Real-Time Collaboration improves efficiency and productivity by enabling users to connect and collaborate with others via instant messaging, presence, chat rooms, and web and voice conferencing. It complements other Enterprise 2.0 services available in Oracle WebCenter by offering real-time collaboration capabilities to users who require direct interaction and immediate response.

Question No : 8

Bottom-up service Identification analyzes existing systems to Identify SOA Services. Top-down service identification analyzes business processes to identify SOA services.

Which statement best describes the relationship between top down and bottom-up service identification in Service-Oriented Integration?

A. Only a bottom up approach shouldbe used because the goal of SOIis to provide SOA Services exposing existing systems.
B. Only a top-down approach should be used because the goal of SOI is composite application assembly.
C. A bottom-up approach should be used to identify which SOA Services are built; then a top-down approach should be used to determine which SOA Services are used by each composite application.
D. A top-down approach should be used to determine the needed SOA Services; then a bottom-up approach should be used to determine how existing source systems can meet the requirements top-down approach should be used by business, and a bottom-up approach should be used by IT.Theoverlap between the SOA Services Identified by the two methods are the ones that should

Answer: D
Explanation:

Note: There are three schools of thought around "how to build an Enterprise Service Oriented Architecture." They are:

* Top down - central group decides everything and the dev teams adopt them.
* Bottom up - central group provides a directory and dev teams make whatever services

they want. Dev teams go to the directory to find services they can use.

* Middle out - central group provides key elements of the interface, including numbering schemes, message exchange patterns, standard communication mechanisms, and monitoring infrastructure, and encourages the dev teams to use it to build services that can be shared.

Question No : 9

Which of the following are the key drivers for Grid computing?

A. Improved server utilization - Grid computing allows companies to lower costs through the efficient use of resources.
B. Better agility and flexibility - Businesses experience constant change and the underlying IT Infrastructure should be agile enough to support that kind of change.
C. OpEx model - Enterprises require pay-as-you-go services to reduce the dependency on capital expenditure and take advantage of the benefits of operational expenditure.
D. Lower Initial cost-There is a need to reduce the Initial investment at the cost of an increased operational cost.

Answer: A,B,D

Explanation: Using a grid computing architecture, organizations can quickly and easily create a large-scale

computing infrastructure from inexpensive, off-the-shelf components (D). Other benefits of grid

computing include

* Quick response to volatile business needs (B)

* Real-time responsiveness to dynamic workloads

* Predictable IT service levels

* Reduced costs as a result of improved efficiency and smarter capacity planning (A)

Note: One way to think about grid computing is as the virtualization and pooling of IT resources—compute power, storage, network capacity, and so on—into a single set of shared services thatcan be provisioned or distributed, andthen redistributed as needed. As workloads fluctuate during the course of a month, week, or even through a single day, the

grid computing infrastructure analyzes the demand for resources in real time and adjusts the

supply accordingly.

Grid computing operates on three basic technology principles: Standardize hardware and software components to reduce incompatibility and simplify configuration and deployment; virtualize IT resources by pooling hardware and software into shared resources; and automate systems management, including resource provisioning and monitoring.

Grid computing operates on these technology principles:
* Standardization.
* Virtualization.
* Automation.

Reference: Oracle Grid Computing, White Paper

Question No : 10

Which of the following statements are true about an end-to-end security strategy?

A. End-to-end security and point-to-point security are virtually identical strategies proposed by different security vendors.
B. End-to-end security strives to protect data at rest, even in temporary queues.
C. End-to-end security often involves some form of message-level protection.
D. When end-to-end security is enabled. Point-to-point transport-level encryption should be disabledin order to avoid cryptography conflicts between layers.
E. End to-end security is highly beneficial for distributed computing environments where many point-point connections and intermediaries exist, because it offers seamless data protection.

Answer: B,C,E
Explanation: B:End to end security is an information-centric perspective of security where information is protected throughout the entire computing environment. That is, from the points where system interactions originate, through all points of integration, processing, and persistence.
End to end security is often associated with the secure transmission, processing, and storage of data, where at no time are data unprotected

Note:

For a typical web-based application, end to end security generally begins at the client/browser, and ends at the application database and all external dependencies of the application.

A common challenge in providing end to end security is finding a suitable way to secure data in all states and points along the processing path that does not interfere with any transmission, routing, processing, and storage functions that need to occur along the way. Sensitive data will usually need to be decrypted at certain points in order for processing or message routing to occur.

Question No : 11

Conceptually, the ORA model of a "modern UI" defines which three layers from the following list?

A. Unified User Interface layer provides the control and visual elements that define the interaction that the user has with the system.
B. Integration layer provides connectors to simplify and standardize Interaction with back-end -terns.
C. Device Management layer provides transformation and transcoding to support a wide variety of devices.
D. Browser Mediation layer adapts output to conform to the standards and capabilities of each browser type.
E. User Interface Services layer provides reusable functions specialized to the needs of the end
F. Access and Incorporation layer provides the capability to Incorporate data and functionality from any number of back-end systems into the user interface.

Answer: A,E,F
Explanation: Note:

Conceptual View
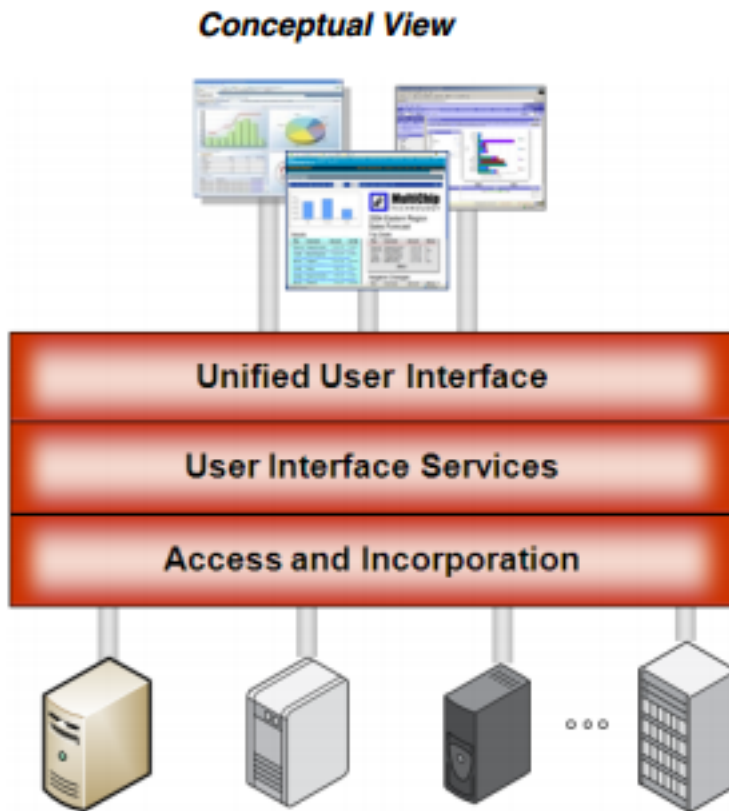
A: The Unified User Interface layer provides the control and visual elements that define the interaction the user has with the system. This layer separates the way the user interacts with the system from the underlying functionality provided by the system. This has many advantages including allowing different display devices to be supported via control and visual elements specialized for the device since, for example, mobile devices do not have nearly the screen real estate of a desktop computer.

E: The User Interface Services layer provides a set of functionality that can be used and reused in a variety of ways to deliver various user interfaces specialized to the needs of the end user. This illustrates that the underlying functionality is separated from the visual and control elements built into the user interface. The services provided by this layer may come from a variety of sources located anywhere that is network accessible.

F: The Access and Incorporation layer provides the capability to incorporate data and functionality from any number of backend systems into the user interface. Generally, there are two types of backend systems that need be incorporated into the user interface: systems that are designed for use with user interface (e.g. LDAP, dedicated database) and systems that are not (e.g. legacy applications). The former type systems can be access directly by the user interface architecture. Ideally the latter type should be accessed via a robust integration architecture rather than relying on point-to-point integrations.

This distinction is the reason that the term "incorporation" is used in this Conceptual View instead of the term "integration." A suitable integration architecture is described in the ORA Service-Oriented Integration document.

Reference: Oracle Reference Architecture, User Interaction, Release 3.0

Question No : 12

A longer term goal of Service-Oriented Integration (SOI) is to enable composite applications that are assembled from SOA Services. Which statement best describes the relationship between composite application assembly and SOA Service engineering?

A. Composite application assembly and SOA Service engineering are separate, decoupled efforts without any meaningful Interaction.
B. All SOA Service engineering must be completed prior to any composite application assembly.
C. Composite application assembly uses service contracts created by SOA Service engineering and generates requirements that are Inputs to SOA Service engineering.
D. SOA Service engineering creates SOA Services following sound engineering principles, while composite application assembly uses SOA Services based on WSPL interfaces.

Answer: C

Explanation:

Composite Applications and SOA Services
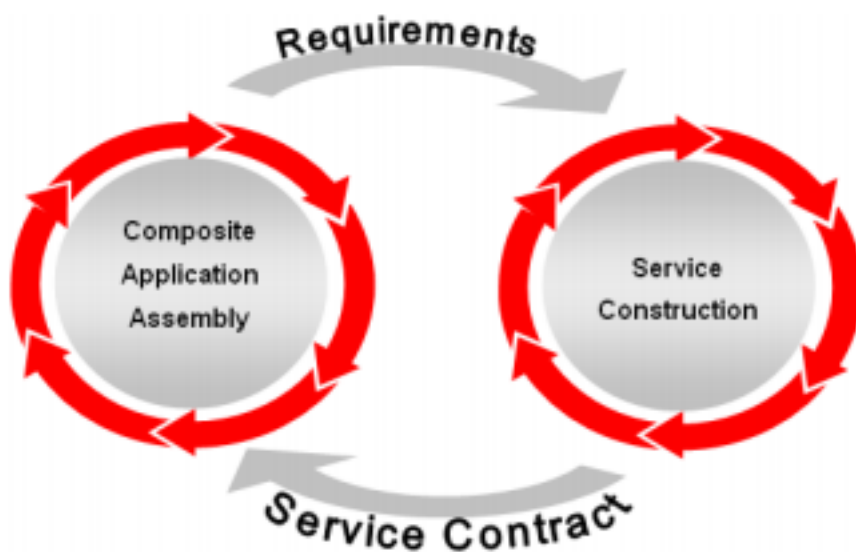
The Oracle Service Engineering Framework is an engineering approach for delivering projects within an SOA environment

The Service Engineering Framework addresses activities at both the program and project scope to consider the requirements of the business outside of the scope of a single project.

Topics covered at the program scope include:

* SOA Requirements Management - Provides a process for harvesting requirements in a manner that naturally facilitates service identification and discovery.
* Service Identification & Discovery - Establishes the procedures around identifying Service candidates, as well as discovering reuse candidates from the existing Service catalog. Takes the process from identification and discovery, through the justification processes required to determine if an existing Service can be viable for reuse in the proposed manner, or if the proposed Service Candidate should be realized as a shared Service.
* Service Release Planning - Provides the groundwork necessary for planning for project and Service deliveries within an SOA

Topics covered at the project scope include:
* Service Definition -
* Service Design -
* Service Implementation - Provides the guidelines for effectively and efficiently developing shared Services.
* Service Testing -
* Service Deployment - Defines the guidelines and practices that need to be considered when deploying Services into a shared environment.
* Service OA&M -

Note:
The primary goal of service-oriented integration is to better leverage existing systemwithin the IT environment by applying service-oriented principles. Ultimately, the goal is to enable the assembly of composite applications, with little or no custom coding, that include capabilities sourced from existing systems. Composite applications are applications that pull together data, functionality, and process from multiple existing sources to solve a business problem or create new business value. Service-oriented integration is the mechanism to expose existing sources of data, functionality, and process so that those sources can be readily consumed by a composite application

Question No : 13

What are the benefits of the browser over traditional user Interfaces (for example, client-server GUI)?

A. HTML provides a richer interface for end users.
B. Development, maintenance, and support costs are reduced.
C. The browser simplifies application deployment compared to dedicated client server GUI applications.
D. There is more variety among browsers than among client-server GUIs.
E. The browser provides a richer graphical environment than client-server GUIs.
F. Browsers can support more diverse devices than dedicated client-server GUI application.

Answer: B,C,F

Question No : 14

Which of the following is not an objective or function of the WS-Trust standard?

A. to enable applications to construct trusted SOAP message exchanges
B. to synchronize Identities across security domains
C. to exchange tokens in order to overcome differencesin supported technology between service consumers and service providers
D. to exchange tokensin order to mapidentities supplied by service consumers with identities supported by service providers

Answer: A

Explanation: Oracle STS leverages the WS-Trust standard protocol to manage token exchange between the Web Service Client (WSC) and the Web Service Provider (WSP) (not C). WS-Trust provides a standard way to send security token requests to any Security Token Service (STS) (not D). This specification can be used to manage token transformation when crossing the various security boundaries of the information system (not B).

Reference: Scalable Identity Propagation and Token Translation through Oracle Security Token

Service, Oracle White Paper

Question No : 15

There are various network topologies that can be used when deploying the Service-Oriented Integration architecture. One deployment option includes three networks: production network, services network and maintenance network. Which statement best describes the uses of these three networks?

A. The production networkisused for all production network traffic. The services networks is used to deploy and configure SOA Services. The maintenance network is used by the operations team to manage the infrastructure.
B. The production network provides connectivity to applications and client access to the Mediation Layer. The services network provides connectivity between the Mediation Layer and the SOA Services. The maintenance network is used by the operations team to manage the infrastructure.
C. The production network provides connectivity to applications and client access to the Mediation Layer- The services networks is used to deploy and configure SOA Services. The maintenance network is used by the operations team to manage the infrastructure.
D. The production network is used for all production network traffic. The services network provides connectivity between the Mediation Layer and the SOA Services. The maintenance network is by the operations team to manage the infrastructure.
E. The production network is used for all production network traffic. The services networks is used to deploy and configure SOA Services. The maintenance network is trusted network, providing administrator access to all hardware and software.

Answer: B
Explanation: Note: Mediation can be broadly defined as resolving the differences between two or more
systems in order to integrate them seamlessly. A typical IT architecture has a variety of systems and components that are fundamentally different. A better alternative to embedding the mediation logic into each of these systems would be to provide the mediation capability in the SOA infrastructure.

Reference: Oracle Reference Architecture, SOA Infrastructure, Release 3.0

Question No : 16

Which four components of the following list should be found in the client tier of the Logical view of the Oracle Reference Architecture User Interaction?

A. Personalization

B. Communication services
C. State management
D. Customization
E. Collaboration
F. Syndication
G. Controller
H. Rendering

Answer: B,C,G,H

Explanation: The Client Tier is hosted on the display device. As mentioned above, this may be a
browser or an thick client specific to the display device.

Regardless of the choice for the Client Tier, there are standard capabilities provided by this tier in the architecture:
Controller: The Controller accepts input from the user and performs actions based on that input.
State Management: The State Management component is responsible for maintaining the current state of the user interface.
Rendering: The Rendering component is responsible for delivering a view of the interface suitable
for the end user.
Communication Services: The Communication Services provide the means to access Service Tier capabilities.

Note: Security Container, Data Management and Composition can also be included here.

Reference: Oracle Reference Architecture, User Interaction, Release 3.0

Question No : 17

Which statement best describes the relationship between Oracle Reference Architecture (ORA) and the Oracle products?

A. ORA describes the architecture built in to the Oracle products.
B. ORA describes the architecture underlying the Oracle Fusion Applications.
C. ORA describes a product-agnostic architecture and then maps the Oracle products onto the architecture.
D. ORA describes an architecture thatis exclusively based on Oracle products.

Answer: C

Explanation: The Oracle Reference Architecture is Applicable to heterogeneous environments. It is independent of specific products or version.

Question No : 18

Interface elements are an important part of modular programming for UI. Which of the following statements is true with regard to Interface elements?

A. Interface elements are always provided as proprietary packages of widgets from device vendors and third parties.
B. There is a wide variety of interface elements that can be developed once and used repeatedly in various user-interface designs.
C. Interface elements are highly standardized and, once developed for one device, they are sufficiently portable to be reused on other devices without modification.
D. Interface elements implement application-specific functionality and are therefore rarely reusable across multiple applications.

Answer: B,C

Explanation: Interface element that a computer user interacts with, and is also known as a control or Widget.

Examples: Windows, Pointer, Text Box, Button, Hyperlink, Drop-down list, List box, Combo box, Check Box, Radio button, Cycle button, Datagrid

Question No : 19

Identify the true statements in the following list.

A. The core components of the ORA UI Logical view are grouped into the client tier and the server tier.
B. The components of the ORA UI Logical view are model, view, and controller.
C. The core components of the ORA UI Logical view are grouped into thedisplaytier and theresourcestier.

D. In addition to the core components, the Logical view also includes security, communication protocols, and development tools.
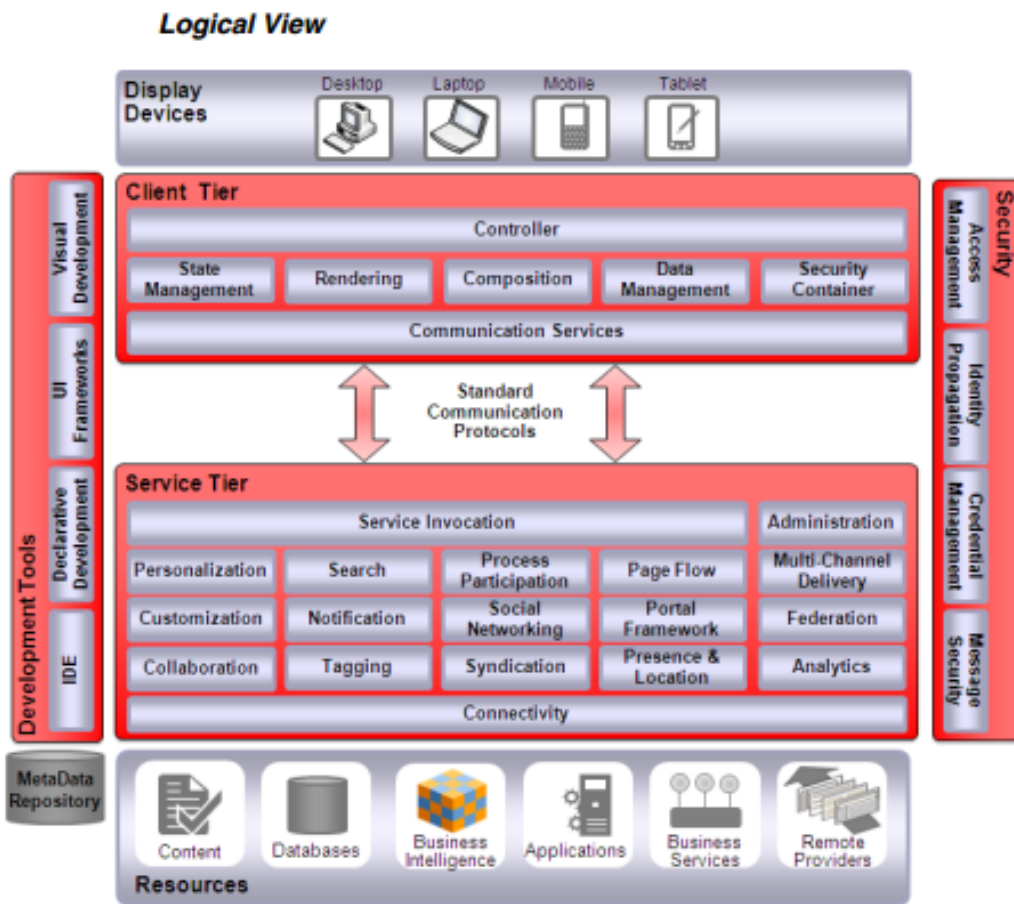
Answer: A,D

Explanation: The Logical View of the architecture describes the various layers in the architecture.

Each layer encapsulates specific capabilities for the overall architecture. Upper layers in the architecture leverage the capabilities provided by the lower layers.

The Client Tier is hosted on the display device.

The Service Tier hosts the capabilities that satisfy the requirements of the end user.

Question No : 20

Where are the components of the client tier Lof the ORA UI logical architecture hosted?

A. on the transcoding engine
B. on the web server
C. on the display device
D. some components on the web server and some on the display device

Answer: C

Explanation: The Client Tier is hosted on the display device, this may be a browser or an thick client specific to the display device
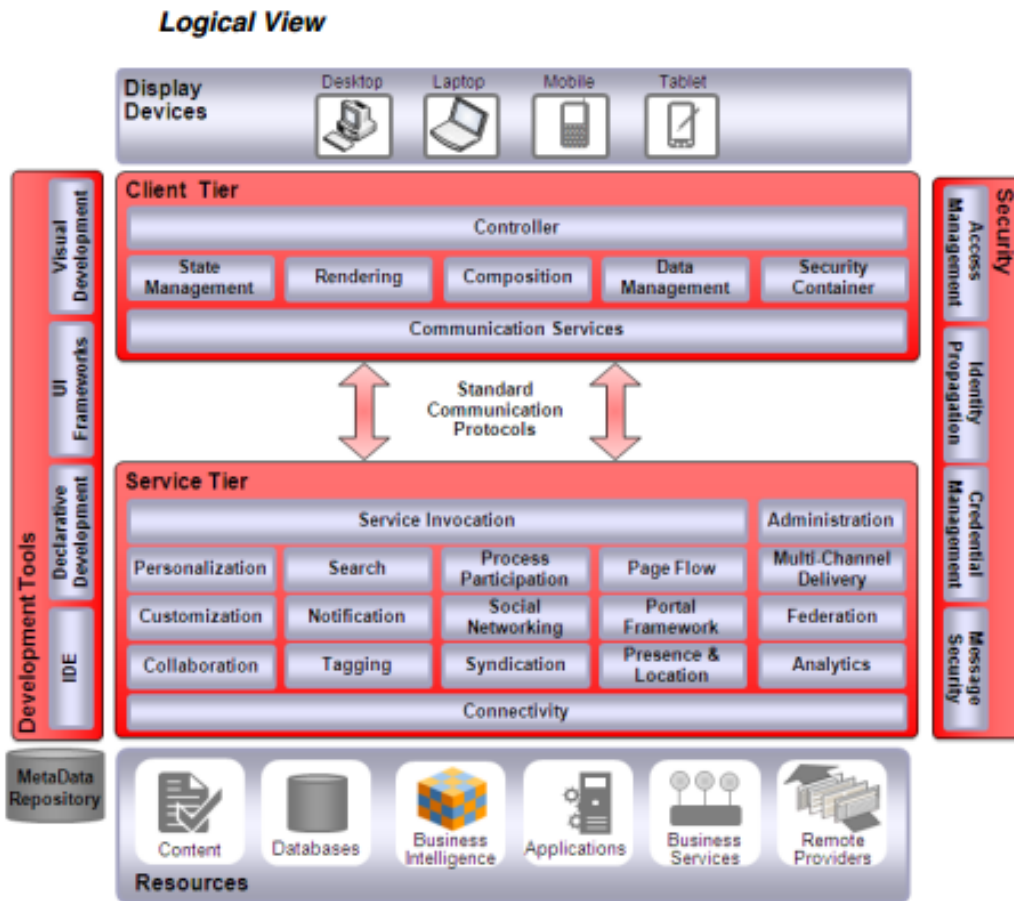
Reference: Oracle Reference Architecture, User Interaction, Release 3.0

Question No : 21

Service Oriented Integration (SOI) exposes capabilities from existing source systems.
Which statement best describes the Impact SOI has on existing source systems?

A. Because SOI exposes only existing capabilities, any new required functionality will be implemented by modifying the existing source systems.
B. No modifications to existing source systems are allowed because SOA Services expose all the necessary capabilities from the source systems.
C. Modifications to existing source systems should be avoided, but may be necessary to support SOA Service creation.
D. To support SOA Service connectivity, modifications will be required for the existing source systems incorporated into the SOI architecture.

Answer: C

Explanation: Some minor modifications may be required to support connectivity, but requiring extensive modifications defeats a major reason for integration.

It must be noted that creating a SOA Service from existing assets generally requires a good deal more than just adding a standards-based interface, i.e. simply service enabling existing assets is insufficient. The SOA Service needs to expose process, functionality, and data that is usable in a broader context than the source of the capability was designed to meet. Therefore, creating a SOA Service usually entails some amount of aggregation, transformation, or expansion of existing capabilities provided by the source systems. This requires a SOA Services layer between the existing assets and the consumers as illustrated in the figure.
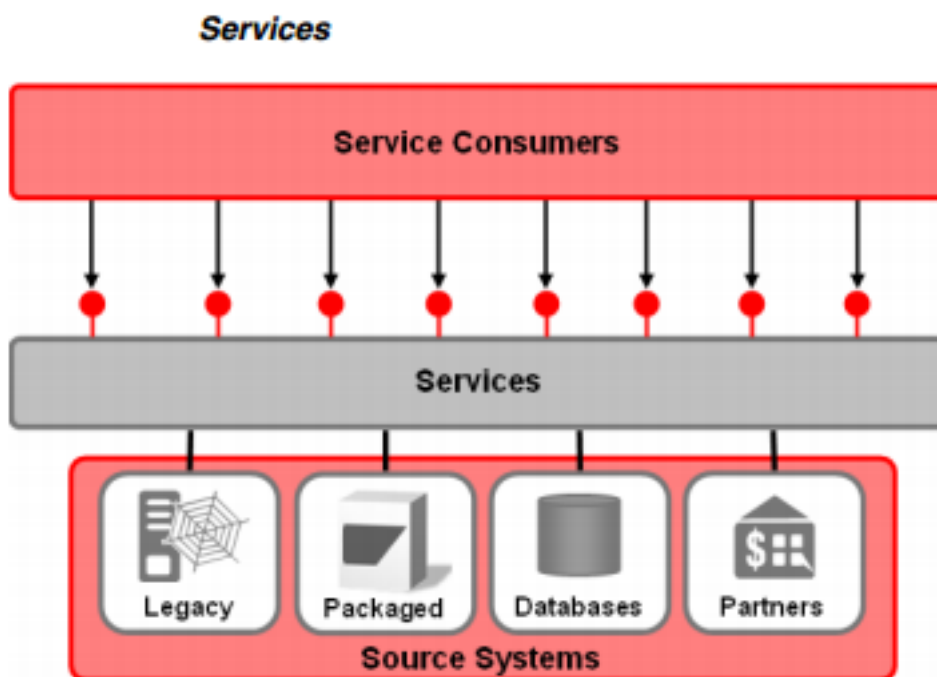
Note: The primary goal of service-oriented integration is to better leverage existing systems within the IT environment by applying service-oriented principles. Ultimately, the goal is to enable the assembly of composite applications, with little or no custom coding, that include capabilities sourced from existing systems.

Composite applications are applications that pull together data, functionality, and process from

multiple existing sources to solve a business problem or create new business value.

Service-oriented integration is the mechanism to expose existing sources of data, functionality, and process so that those sources can be readily consumed by a composite application.

Service construction includes creating entirely new SOA Services and also exposing existing assets as SOA Services.

Reference: Oracle Reference Architecture, Service-Oriented Integration, Release 3.0

Question No : 22

IT Strategies from Oracle (ITSO) Includes multiple Enterprise Technology Strategies. Why are there multiple Enterprise Technology Strategies within ITSO?

A. Each enterprise Technology Strategy documents the architecture for a particular Oracle product.
B. Each Enterprise Technology Strategy provides Oracle product details that are important to the technology strategy.
C. An Enterprise Technology Strategy provides detailed guidance on deploying the oracle products that are important to the technology strategy.
D. Each Enterprise technology Strategy provides a reference architecture and practical guidance to achieve success with specific new technology.
E. Each Enterprise Technology Strategy provides industry-vertical reference architecture and practical guidance.

Answer: D

Explanation: IT Strategies from Oracle (ITSO) is a series of documentation and supporting material designed to enable organizations to develop an architecture-centric approach to enterprise-class IT initiatives. ITSO presents successful technology strategies and solution designs by defining universally adopted architecture concepts, principles, guidelines, standards, and patterns.

ITSO is made up of three primary elements Oracle Reference Architecture (ORA), Enterprise Technology Strategies (ETS) and Enterprise Solution Designs (ESD).

Enterprise Technology Strategies (ETS) offer valuable guidance on the adoption

of horizontal technologies for the enterprise. They explain how to successfully execute on a strategy by addressing concerns pertaining to architecture, technology, engineering, strategy, and governance. An organization can use this material to measure their maturity, develop their strategy, and achieve greater levels of adoption and success. In addition, each ETS extends the Oracle Reference Architecture by adding the unique capabilities and components provided by that particular technology. It offers a horizontal technology-based perspective of ORA.

Reference: Oracle Reference Architecture, Cloud Foundation Architecture, Release 3.0

Question No : 23

The Mediation Layer in the Logical View of the Service-Oriented Integration architecture provides several capabilities. Which of the following are capabilities provided by the Mediation Layer?

A. enrichment - adding data elements to a data entity to give the entity increased Information
B. routing - sending the client request to the appropriate provider (s) based on some criteria
C. message transformation - converting the request message format to a different message form, appropriate for the provider
D. choreography - defining the messages that flow back and forth between systems that are participating in a business process
E. protocol mediation - converting a client request from one protocol to a different protocol used by provider

Answer: B,C,E
Explanation: The Mediation Layer provides loose coupling for the entire architecture. It decouples
the layers of the architecture as well as decoupling external users of the layers from the specific layers in the architecture.
The key capabilities in this layer include:
* Routing - Routing provides the ability to send the client request to the appropriate provider based on some criteria. The routing may even include sending the client request to multiple providers. This capability facilitates location transparency, versioning, scalability, partitioning, request pipelining, SLA management, etc.
* Protocol Mediation - Protocol mediation is the ability to handle a client request

using one protocol (e.g. WS*, JMS, REST) with a provider using a different protocol. This provides protocol decoupling between the provider and the consumer.

Message Transformation - Message transformation allows a client request using one message format to be handled by a provider that expects a different message format. This provides message format decoupling between the provider and the consumer.

* Discovery - Discovery is the mechanism by which a client finds a provider of a particular SOA Service. Discovery can occur at design time or runtime.
* Monitoring - Monitoring captures runtime information about the messages flowing through the mediation layer. Since the mediation layer is an intermediary for message traffic, it provides a centralized monitoring capability.
* Policy Enforcement - Policy enforcement provides consistent application of policies (e.g. WS-SecurityPolicy) across all messages flowing through the mediation layer. Since the mediation layer is an intermediary for message traffic, it provides a centralized policy enforcement capability.

Reference: Oracle Reference Architecture, Service-Oriented Integration, Release 3.0

Question No : 24

Which one of the following types of access control should be used when access to a resource is dependent upon specific qualities of the user, for example, membership status, frequency of purchases, or level of certification?

A. role-based access control
B. rule-based access control
C. discretionary access control
D. content-dependent access control
E. attribute-based access control

Answer: C

Explanation: Content dependent access control involves restricting access to content, such as
documents and emails, based on embedded keywords or certain assigned metadata. It works by inspecting the content and applying rules to determine if access is permitted. This approach is taken by many Data Loss Prevention solutions. It is possible to

combine content dependent access control with role-based access control in order to restrict access to content by established roles.

Reference: Oracle Reference Architecture,Security, Release 3.1

Question No : 25

BPM and SOA are frequently combined to provide greater business value than either technology provides independently. Which statements are true with regard to combining the BPM Technology Perspective and SOA Technology Perspective?

A. A Business Process may invoke a SOA Services to perform specific tasks within the process flow.
B. A Business Process may be exposed as a SOA Service.
C. When combining SOA and BPM, all the tasks within a Business Process are accomplished via Services.
D. A Business Process may invoke an SOA Service, but an SOA Service cannot invoke a Business Process.
E. Every business Process is exposed as a SOA Service.

Answer: A,B,D

ExplanationBPM and SOA Relationship
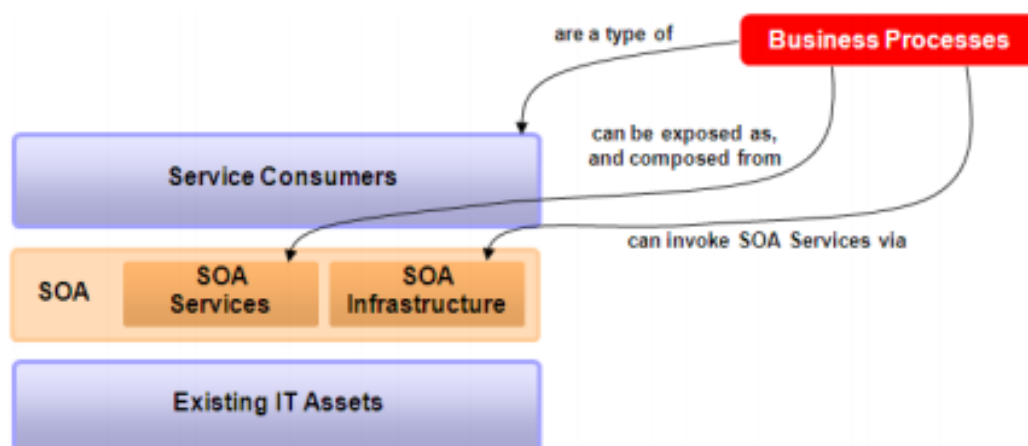
Note E: BPM processes and sub-processes can (but are not required) themselves be exposed as SOA Services. This enables processes to be composed of SOA Services that are implemented
as processes. It can be beneficial in two ways. First, it improves reuse of lower level

system-centric processes (i.e. service orchestrations), and second, it offers a standard interface mechanism with which to invoke all types of business processes.

Note: BPM and SOA are often used together, as they both support a closer alignment between business and IT, and they both promote agility. BPM targets alignment and agility at the process level, while SOA applies more at the activity level. Hence, business processes and SOA Services can represent business constructs, providing a mapping between the things business does and the way IT helps get it done.
The convergence of BPM and SOA generally happens via process decomposition. That is when business processes are modeled as, (i.e. decomposed into), activities. All automated activities must be backed by some form of executable code or function call. These functions, if they are deemed worthy, can be engineered as SOA Services following service-oriented design principles. Agility at the process level is attained by changing the process model. Agility at the service level is achieved by deploying services that are loosely coupled and independently managed.

Question No : 26

Which of the following interactions does not occur as part of a web-based single sign-on scenario?

A. A gateway, deployed In the Web Server, intercepts requests destined for protected resource
B. The user is prompted for login credentials when a protected resource is accessed and the user has not (recently) logged In.
C. Credentials are passed to the application for validation.
D. Authorization checks are optionally performed before the user is permitted access to the application.
E. A cookie is returned, which is used to permit access to other protected resources in that domain

Answer: C
Explanation: The application does not handle the validation.

Question No : 27

Which are the major categories of ORA Engineering capabilities?

A. Integrated Development
B. Asset Management
C. Event Processing
D. Service Engineering

Answer: A,B

Explanation: The broad categories that define ORA Engineering are:

* Integrated development

This covers a wide range of engineering capabilities required to model, design and build solutions. These capabilities go beyond simple editing and include advanced capabilities to support round-trip engineering, integrated testing, deployment, and asset management.

* Asset Management

Asset Management deals with the visibility, management and governance of assets and asset metadata. It covers the capabilities required to effectively manage enterprise assets.

* Quality Management

Quality Management capabilities ensure that the developed solution meets the enterprise standards and pass the exit criteria. Quality Management covers testing, defect management, and continuous integration.

* Deployment Management

Deployment Management deals with building, packaging, migration, and deployment of assets.

ORA Engineering Categories
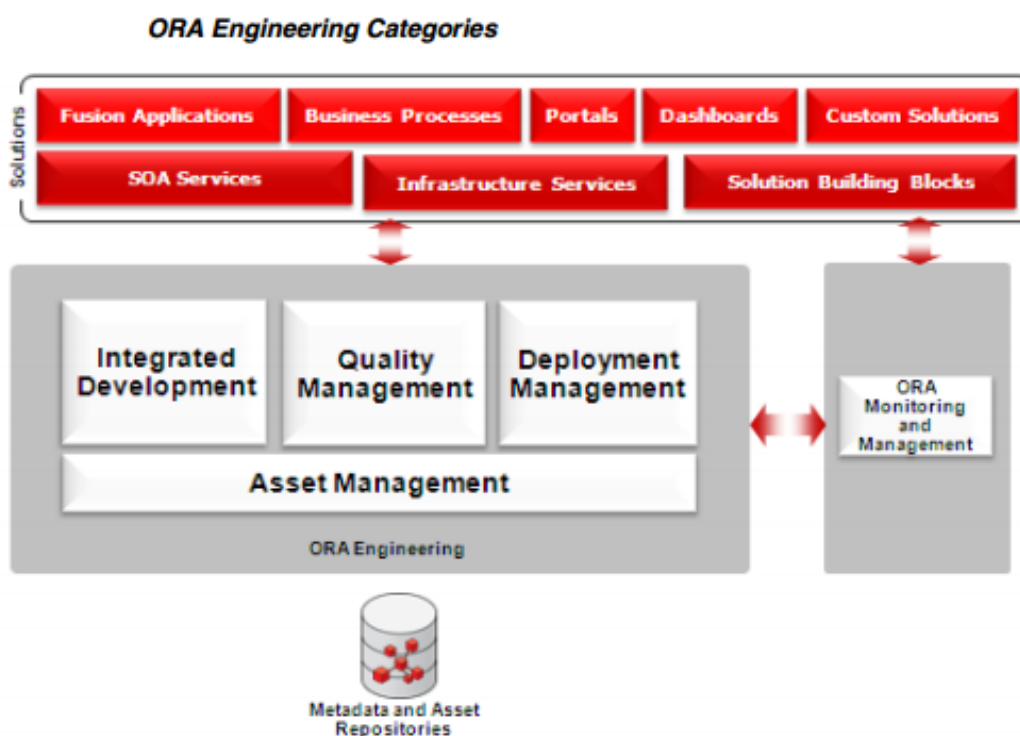
Reference: Oracle Reference Architecture,Software Engineering, Release 3.0

Question No : 28

Enterprise Architecture consists of Business Architecture, Application Architecture, Information, Architecture and Technical Architecture (BAIT). Which statement best describes Oracle Reference Architecture (ORA) in the context of BAIT?

A. ORA addresses all four (Business, Application, Information, and Technical) equally.
B. ORA is primarily focused on the Technical Architecture, with some content on the other three aspects- of BAIT.
C. ORA has content applicable to the Technical Architecture only.
D. ORA is primarily focused on the Business Architecture, with some content on the other three aspects of BAIT
E. ORA is primarily focused on the information Architecture, with some limited content on the other three aspects of BAIT.
F. ORA has content applicable to Information Architecture only.

Answer: A

Explanation: Oracle Reference Architecture(ORA) defines a detailed and consistent reference
architecture for developing and integrating solutions based on current
technologies from Oracle and other vendors. The reference architecture offers
architecture views, principles, and guidance based on recommendations from
technical experts across Oracle. It covers a broad spectrum of concerns pertaining
to technology architecture, including middleware, database, hardware, processes,
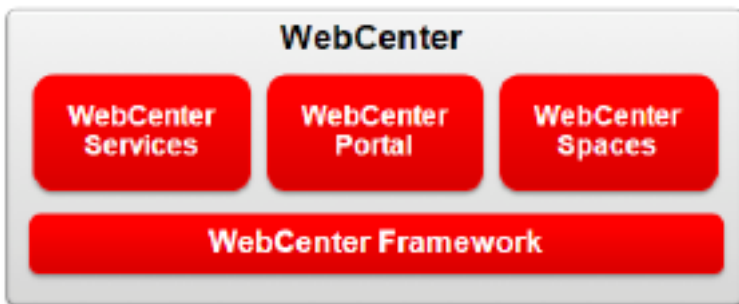and services.

IT Strategies from Oracle
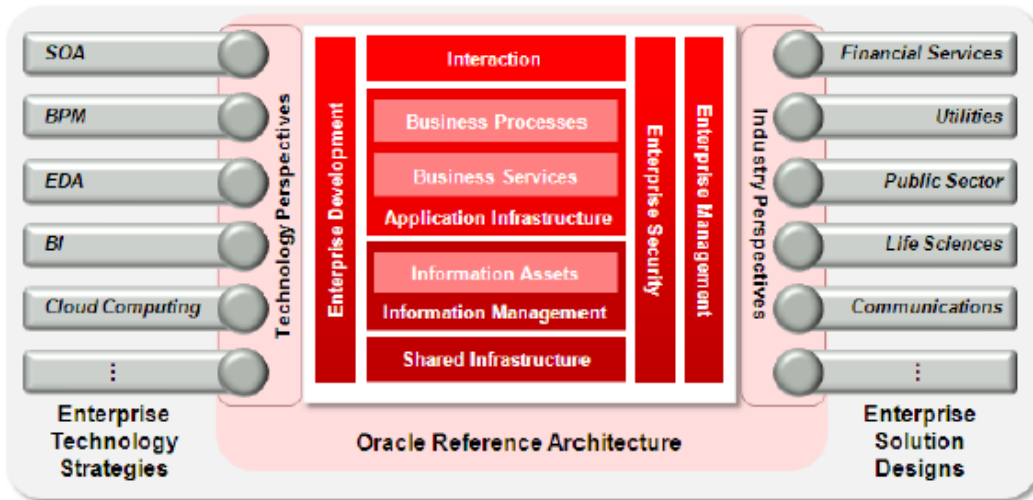
Question No : 29

Which of the following statements are true?

A. (OWCS) provides components for reverse proxy, personalization, customization, social computing, and analytics.
B. Oracle WebCenter (OWC) provides the Resource Tier of the Oracle Reference Architecture User Interaction.
C. Oracle HTTP Server (OHS) provides the standard communication protocols (for example, HTTP) between the Client Tier and the Service Tier as well as the Message Security between the Client Tier and Service Tier.
D. Oracle Meta Data Services (OMDS) stores customization, personalization, and other metadata in a repository
E. Oracle WebLogic Suite (OWLS) is used in Oracle Reference Architecture User Interaction to enable Ontology languages for the Semantic Web

Answer: B,D

Explanation: B: Oracle WebCenter (OWC) - provides the foundation for delivering a modern user

experience for Oracle Fusion Middleware as well as Oracle Fusion Applications.

OWC is composed of four main components as illustrated in the figure:

D: Oracle Meta Data Services (OMDS) - stores customization, personalization, and other metadata in a repository. The repository can either be stored in a database or in file-based storage.

Question No : 30

The Oracle Reference Architecture (ORA) includes the concept of Technology Perspectives. Which statements are true concerning ORA and Technology Perspectives?

A. Each Technology Perspective focuses on a particular set of products and technology.
B. A Technology Perspectiveincludesboth reference architecture views as well as practical guidance and approaches for successfully implementing the changes required to embrace the products and technology.
C. The Technology Perspectives can be used individually or in combinations, for example, SOA with BI.
D. The Technology Perspectives can be used individually or in combinations. When used in combinations, the SOA Technology Perspective must be included.
E. Each Technology Perspective is part of ORA and is part of an Enterprise Technology Strategy; i.e. a Technology Perspective is the connection between ORA and an Enterprise Technology.

Answer: A,C,D,E
Explanation: Technology perspectives extend the core material by adding the unique capabilities,
components, standards, and approaches that a specific technology strategy offers.(A) SOA, BPM, EPM/BI, and EDA are examples of perspectives for ORA.

Each technology strategy presents unique requirements to architecture that includes specific capabilities, principles, components, technologies, standards, etc. Rather than create another reference architecture for each strategy, ORA was designed to be

extensible to incorporate new computing strategies as they emerge in the industry.

In order to present the reference architecture in the most effective manner, each new technology strategy adds a perspective to ORA. This enables the reference architecture to evolve holistically. New computing strategies extend the core material, providing further insight and detail as needed.
A perspective extends the ORA core collateral by providing views, principles, patterns, and guidelines that are significant to that technology domain yet cohesive with the overall ORA. The perspective includes:
* A foundation document describing the terms, concepts, standards, principles, etc. that are important to the ETS.
* An infrastructure document that defines a reference architecture built using the technologies pertinent to the ETS.

Reference: IT Strategies from Oracle, An Overview, Release 3.0

Question No : 31

Oracle Web Services Manager uses an agent-based approach to providing Web Services security. Where are these agents deployed?

A. In any IPv4 of Later network firewall
B. In the Oracle WebLogic Server Web Service request Interceptors
C. In the Oracle Service Bus proxy pipeline
D. In the Oracle Access Manager web gate
E. In the Oracle WebLogic Server access gate

Answer: D

Explanation: You use the Web Services Manager Control Console to define Oracle Web Services Manager components such as server agents. The server agent acts as an enforcement point for security policies.

Point your browser to the Web Services Manager Control Console and log in using your single sign-on user name and password.
The Web Services Manager Control Console is accessed with a URL of the form:
http://*<hostname>:port_number*/ccore

Question No : 32

Your company has decided to create an Enterprise Architecture following. The Open Group Architecture Framework (TOGAF). Which option best describes how the IT Strategies from Oracle (ITSO) library of material relates to this TOGAF-based Initiative?

A. ITSO has minimal applicability because TOGAF is a complete architecture framework.
B. The ITSO material can be used as reference material within the TOGAF approach.
C. The TOGAF approach will need to be modified (customized) to incorporate the ITSO material.
D. The ITSO material will need to be adapted to the TOGAF approach.
E. TOGAF and ITSO are mutually exclusive. One or the other must be chosen as the basis for the company's Enterprise Architecture.

Answer: A

Explanation: The ITSO, and, being part of it, the Oracle Reference Architecture is not an Architecture Framework. For this, many solutions are already available, of which TOGAF andOracle's Enterprise Architecture Framework (OEAF) are good examples. The ORA can be perfectly integrated in any of the currently available frameworks.

Note: The IT Strategies from Oracle give you a whole library of whitepapers, not only to develop a Reference Architecture for your own, by adapting the ORA to your needs, but it also focuses on the surrounding Enterprise Technology Strategies and Enterprise Solution Designs. In other words, ITSO covers both the horizontal technology perspectives (SOA, BPM, EDA, etc.), but also the vertical business perspectives (Utilities, Government, etc.).Now, in case you think that this is all about Oracle Technology products, you might be surprised: the whole ITSO / Oracle Reference Architecture is Vendor-Neutral. It is only scoped to Oracle's product portfolio. Now, one might ask themselves: what technology product area's doesn't Oracle have products for, so that shouldn't be too much of an issue as far as completeness is concerned.ITSO can help you organizing complex product landscapes, by means of a holistic approach to technology adoption. By covering the technology as a whole, you can reduce risk and become more in control of your IT solutions.

Question No : 33

Which of the following are strategies for alert management with Oracle Enterprise Manager?

A. controlling the volume of alerts
B. removing unwanted alerts
C. centralized filtering of alerts
D. automating fix for common alerts

Answer: B,D

Explanation: B: New in Enterprise Manager 10g Release 5 (10.2.0.5)
Alert Management Enhancements: Administrators can better manage their log-based alerts (e.g., alert log alerts) by setting duration-based notification rules that clear such alerts on a periodic basis, or by using new EMCLI verbs that support bulk clearing of such alerts.
D: New in Enterprise Manager 10g Release 5 (10.2.0.5)
Alert Management Enhancements: On-demand evaluation of alerts allow administrators to quickly verify whether the fixes implemented for alerts result in clearing of the alert.

Note: Advanced alert management

Question No : 34

Which of the following token profiles is not included in the WS-Security standard as a standard type of identity token?

A. XACML token profile
B. SAML token profile
C. username token profile
D. Kerberos token profile
E. X.500 token profile

Answer: A

Explanation:
TheWS-Securityspecification allows a variety of signature formats, encryption algorithms and multiple trust domains, and is open to various security token models, such as:
* X.509 certificates (not E)
* Kerberos tickets (not D)
*UserID/Password credential (not C)

* SAML Assertions (not B)

*custom-defined tokens.

Note: WS-Security (Web Services Security, short WSS) is a flexible and feature-rich extension to SOAP to apply security to web services. It is a member of the WS-* family of web service specifications and was published by OASIS.

Question No : 35

Which of the following is NOT defined as a primary ORA computing foundation component?

A. Distributed Computing
B. Utility Computing
C. Grid Computing
D. Caching

Answer: D

Explanation: Primary ORA computing foundation components:

Distributed Computing

On-Demand Computing

Utility Computing

Grid Computing

Cloud Computing

Elastic Computing

Virtualization

Reference: Oracle Reference Architecture, Application Infrastructure Foundation, Release 3.0

Question No : 36

Which of the following capabilities are provided by containers?

A. Transaction Support
B. Security Support
C. Thread Management
D. Business Processes

Answer: A,B,C

Explanation: Containers provide several capabilities that include the following:

Transaction Support (A)

Security Support (B)

Scalability and Performance

Thread Management (C)

Data and Code Integrity

Centralized Configuration

Connection and Session Management

Abstraction

Reference: Oracle Reference Architecture, Application Infrastructure Foundation, Release 3.0

Question No : 37

Which of the following Oracle products provides a comprehensive Integrated Development Environment (IDE)?

A. Oracle Enterprise Pack for Eclipse
B. Oracle JDeveloper
C. Oracle Service Registry
D. Enterprise Manager

Answer: A,B

Explanation: A: Oracle Enterprise Pack for Eclipse is a free set of certified plug-ins, enabling WebLogic developers to support Java EE and Web Service standards. Oracle Enterprise Pack for Eclipse supports development with technologies including Database, Java SE, Java EE, Web Services, XML, Spring Framework and Oracle Fusion Middleware. B: Oracle JDeveloper is a free integrated development environment that simplifies the development of Java-based SOA applications and user interfaces with support for the full development life cycle.

Incorrect answers

Oracle Service Registry and Enterprise Manager are not development tools.

Question No : 38

Which of the following statements best describes how the deployment supports closed-loop governance?

A. The Metadata Repository is integrated with the operational systems to link operational metrics to the assets to ensure that the assets perform asintended.
B. The Metadata Repositories deployed in each environment are chained to share asset usage information.
C. A closed-loop governance framework is deployed on a clustered server to monitor the governance activities.
D. Production systems are integrated to the developer desktops to validate the requirements against the implemented code.

Answer: B,C

Explanation: SOA Software's Policy Manager and Service Manager combine to form a comprehensive closed-loop SOA Governance solution.

Closed loop means:
* Defining and managing actionable policies in a governance solution at design-time
* Enforcing these policies via deep integration with a management solution at run-time
* Auditing that these policies are being enforced
* Using industry standards (WS-Policy, WS-MEX) where appropriate for information exchange
Closed loop infrastructure enables demand and Value Management
* Collect performance, usage and exception statistics at run-time
* Track these statistics via the governance solution
* Use live, audited information to drive value-based decisions about the effectiveness of different services and organizations
* Provide developers with up to the minute information about a service in runtime to inform their decisions about which services to use
* Manage supply and demand to ensure maximum efficiency and benefit from SOA

The products share a common registry and metadata repository to ensure seamless integration and offer active governance. Closed-loop governance will:

* Ensure defined policies are enforced

** When you define a policy for a service you have to KNOW categorically that it is being enforced

** Generate audit trails for run-time and design-time policy compliance

* Measure the real-world value of SOA

** Not just theoretical value

** How many applications are using each service, and how much are they using it

** NOT how many applications have asked to use a certain capacity of each service

* Manage, monitor and control relationships between consumers and providers

** Enforced contracts

** Capacity planning Change management

The diagram below shows the relationships between SOA governance, security and management, demonstrating how SOA Policy Management forms a closed loop of policy, metrics, and audit.
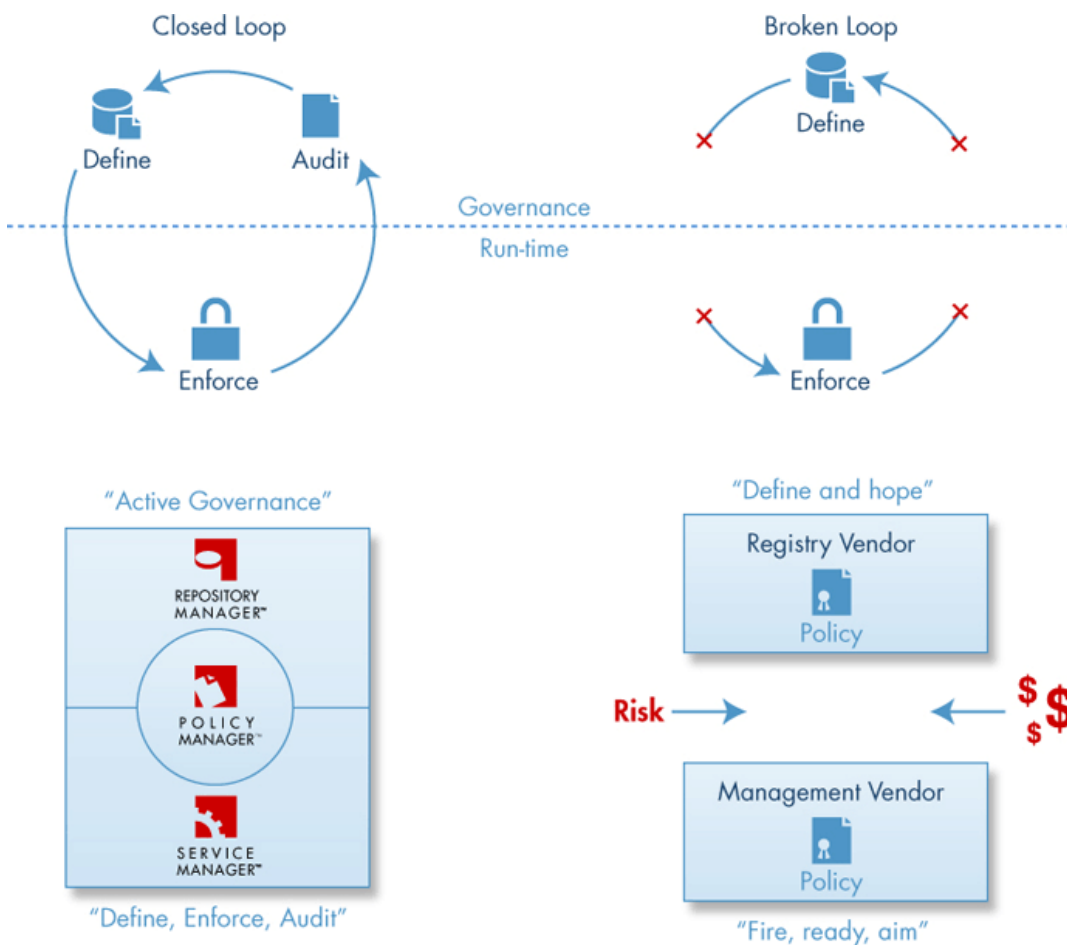
http://www.soa.com/images/img_closed_loop.gif

Question No : 39

Which of the following are common uses of an Attribute Service?

A. to maintain metadata pertaining to audit log entries and attestation reports
B. to acquire data that are necessary to make access-control decisions
C. to securely supply personally identifiable information to applications
D. to determine which security policy is assigned to a Web Service

Answer: B,C

Explanation: The Attribute Service(AS) retrieves user information from an attribute store.
The AS retrieves user information associated with a user from variety of authoritative
identity stores including, but not limited to, LDAP and database stores.

Question No : 40

Conventional Management and Monitoring tools focus and produce metrics on which one
of the following?

A. holistically across heterogeneous systems
B. metrics that measure individual resources
C. metrics that focus on understanding the relationship and Interactions between
component
D. metrics that capture the combined behavior of several components interacting with the
shared component

Answer: B

Explanation: Conventional tools tend to focus and produce metrics on individual resources
which is
inadequate for an agile shared services computing environment.

Note:
A metric is a unit of measurement used to report the health of the system that is
captured from the monitored infrastructure components. Metrics from all monitored

infrastructure components are stored and aggregated in the Management Repository, providing administrators with a rich source of diagnostic information and trend analysis data.

Reference: Oracle Reference Architecture,Management and Monitoring, Release 3.0

Question No : 41

Which of the following statements are true about perimeter security?

A. Though it is often associated with network security, it also applies to physical security measures as fences and locked doors.
B. It is most effective when there is only one perimeter. For example, when inner perimetersare established, they reduce the effectiveness of outer perimeters.
C. The Demilitarized Zone (DMZ) is the most protected zone of the network, which should be reserved for only the most sensitive data.
D. Connections should not be permitted to span more than one perimeter or firewall.
E. Perimeter security can be a component of a defense-in-depth strategy.
F. Perimeter security is most effective for protection against insider threats.

Answer: A,D,E

Explanation: A: Your inner perimeter consists of the doors, windows and walls of your building(s). Protecting your inner perimeter is usually accomplished with locks, keys and alarm systems.

D:

E: Defense in depth is a security strategy in which multiple, independent, and mutually reinforcing security controls are leveraged to secure an IT environment. Defense in depth should be applied so that a combination of firewalls, intrusion
detection and prevention, user management, authentication, authorization, and encryption mechanisms are employed across tiers and network zones.
Defense in depth is compatible with perimeter security
in that network perimeters (or more generically, protection zones) can make up part of the defense in depth strategy.

Reference: Oracle Reference Architecture,Security, Release 3.1

Question No : 42

Which three primary components form IT Strategies from Oracle (ITSO)?

A. Enterprise Technology Strategies
B. Maximum Availability Architecture
C. Enterprise Solution Designs
D. Oracle Reference Architecture
E. Oracle Enterprise Architecture Framework
F. Oracle Unified Method

Answer: A,C,D

Explanation: ITSO is made up of three primary elements.

Enterprise Technology Strategies (ETS)

Enterprise Solution Designs (ESD)

Oracle Reference Architecture (ORA)

Reference: IT Strategies from Oracle, An Overview, Release 3.0

Question No : 43

Which of the following are the implications of the architecture principle, "Asset-centric approach must be applied to engineering processes"?

A. The development Infrastructure must support asset-centric engineering.
B. Assets must be associated with meaningful metadata that can be used to discover and interpret the assets.
C. Solutions developed must beintegrated and tested early and often.
D. Existing assets must be reused to fulfill whole or part functionality when available.

Answer: B

Explanation: The underlying core principle of ORA Engineering is asset sharing and enterprise

development through an integrated asset management approach. Most organizations use a Software Configuration Management (SCM) or Version Control System (VCS) for managing the code and configuration assets. These tools are great for managing the versioning of assets produced but they don't maintain the metadata of the assets. Without metadata assets are not organized in context and it is hard to discover them.

ORA recommends an asset-centric engineering process, where
an Asset Manager is used to address the challenges posed by the traditional
approaches. The Asset Manager is typically an enterprise-scoped Metadata Repository
working in concert with SCMs and other types of asset repositories.

Reference: Oracle Reference Architecture,Software Engineering, Release 3.0

Question No : 44

What shortcomings of the Version Control Systems drive the need for a Metadata
Repository?

A. Version Control Systems are not easily searchable.
B. Version Control Systems lack robust metadata that allows developers to determine
relevance.
C. Version Control Systems don't provide the level of consumer tracking and reporting
necessary to support software reuse.
D. Version Control Systems do not allow the asset versions to be rolled back to a
previousstate

Answer: B

Explanation: The underlying core principle of ORA Engineering is asset sharing and
enterprise
development through an integrated asset management approach. Most organizations
use a Software Configuration Management (SCM) or Version Control System (VCS)
for managing the code and configuration assets. These tools are great for managing the
versioning of assets produced but they don't maintain the metadata of the assets.
Without metadata assets are not organized in context and it is hard to discover them.
ORA recommends an asset-centric engineering process, where
an Asset Manager is used to address the challenges posed by the traditional
approaches. The Asset Manager is typically an enterprise-scoped Metadata Repository
working in concert with SCMs and other types of asset repositories.

Reference: Oracle Reference Architecture,Software Engineering, Release 3.0

Question No : 45

Which of the following are true statements about the benefits of standardizing on a common security framework?

A. Security requirements no longer need to be specified for eachindividual application; the framework will automatically determine what security needs to be applied.
B. A common set of security services and information can be used across the organization, promoting Infrastructure reuseand minimizing inconsistencies.
C. Secure application integrationis made easier via standardization on a preferred subset of technologies and options.
D. Administration and auditing are improved due to rationalization and standardization of identities, attributes, roles, policies, and so on.
E. Interoperability amid federation are easier to achieve via the adoption of common security and technology standards.

Answer: A,B,E

Explanation: In order to provide security in a consistent manner, a common set of infrastructure,
e.g. a security framework, must be used. The purpose of this framework is to rationalize security across the enterprise by:
* Establishing a master set of security data that reflect the policies, IT resources, participants and their attributes across the entire domain of security
* Mapping organizational structures, computing resources, and users to roles in a way that clearly depicts access privileges for the organization
* Maintaining fine-grained access rules based on roles that have been established for the organization
* Propagating the master security data to individual applications and systems that enforce security (A)
* Detecting changes to security data residing on systems that have not been propagated from the master source of record, and sending alerts regarding these inconsistencies
* Providing common security services, such as authentication, authorization, credential mapping, auditing, etc. that solutions can leverage going forward in place of custom-developed and proprietary functions (B)
* Facilitating interoperability between systems and trust between security domains by acting as a trusted authority and brokering credentials as needed(E)
* Centrally managing security policies for SOA Service interactions

The security framework should provide these types of capabilities as a value-add to

the existing infrastructure. The intent is not to discard the capabilities built into current applications, but rather to provide a common foundation that enhances security across the enterprise. Security enforcement can still be performed locally, but security data should be modeled and managed holistically.

Incorrect:
C: Not a main goal.
D: Ease of administration and auditing is not a main goal here.

Reference: Oracle Reference Architecture,Security, Release 3.1, 4.1.1 Purpose of a Security Framework

Question No : 46

You are developing an Integration component that uses customer data. The source system defines customer data in a different format than expected. Which of the following options best describes how you would develop the component?

A. Create an object representation of customer data and use itin the component.
B. Externalize the data transformation by mapping the source data format to a canonical data format.
C. The data formats are different, so it is not possible to develop the component.
D. Write data from the source system into a database and read it back in the expected format.

Answer: A

Explanation:
Note:
It is quite common to encounter use cases that require transformation of information from one format to another, especially in the area of enterprise integration. Source systems and target systems may use very different representations of data and in some cases, a canonical data model might be used as a common intermediate format. In some cases, the transformation is a simple field-to-field mapping whereas in other cases it is a complex manipulation and conversion of data. It should be possible to visually map the source and target representations with the ability to enrich the elements to support both simple and complex data transformations.

Question No : 47

The Service-Oriented Integration (SOI) architecture includes an event-handling capability as illustrated and described in the Process View. Which statement best describes the rationale for including event handling in the SOI architecture?

A. Event-Driven Architecture (EDA) is a subset of SOI, so including event handling provides the EDA part of SOI.
B. The event-handling capability allows arbitrarily complex events to be handled by the architecture; i.e. Complex Event Handling (CEP) is part of the SOI architecture.
C. AH other interactions within the architecture are upper layers calling lower layers. The event-handling capability allows a Connectivity Service to call a Business Service, thus providing the ability to lower layers to call upper layers in the architecture.
D. The event-handling capability allows a back-end system that is included in the SOI to initiate action because something important has occurred within the back-end system.
E. By employing a publish-and-subscriber message approach, the event-handling capacity allows the SOI architecture to handle high-volume message traffic because publish-and-subscribe handles higher message volumes than request-response.
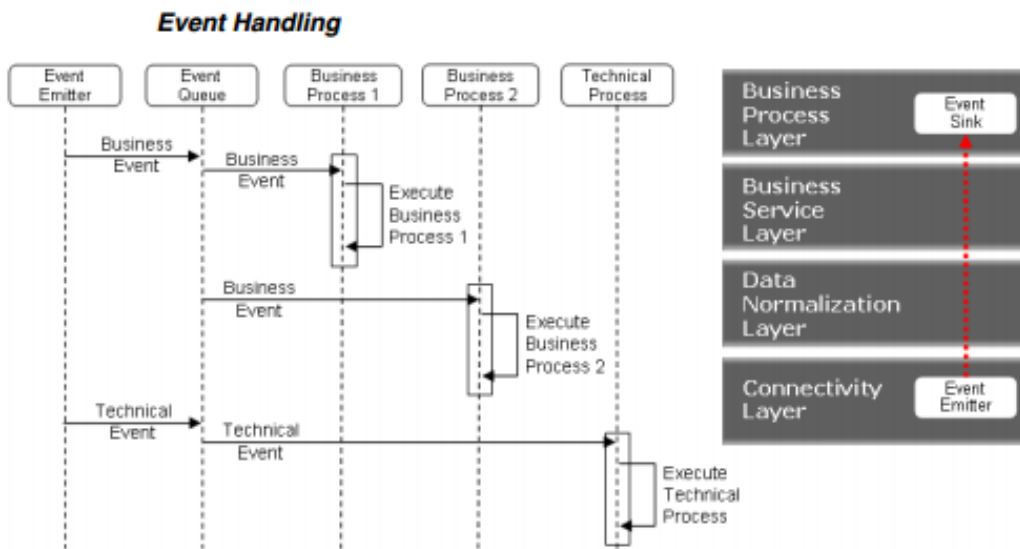
Answer: D

Explanation:

Note:

Events allow one system (event emitter) to notify other systems (event sink) that something of interest has changed. There are two broad categories of event types:
* Business Event - A business event is an event that is of business relevance and would be readily understood by a business person.
* Technical Event - A technical event is an event that is relevant to IT but not directly relevant to the business.

As illustrated by the figure below, in this architecture all events are routed to the Business Process Layer and the appropriate business processes are executed for that event. Essentially this is a mechanism for a lower level in the architecture stack, the Connectivity Layer, to initiate actions that might include interactions with all other levels in the architecture. This is essential since the generated event will likely be backend system specific; therefore it is likely that the data must be normalized and some amount of custom logic may be required to convert the event into an event that is backend system agnostic.

Event Handling

Event Emitter | Event Queue | Business Process 1 | Business Process 2 | Technical Process

Business Event

Business Event

Execute Business Process 1

Business Event

Execute Business Process 2

Technical Event

Technical Event

Execute Technical Process

Business Process Layer — Event Sink

Business Service Layer

Data Normalization Layer

Connectivity Layer — Event Emitter

Reference: Oracle Reference Architecture, Service-Oriented Integration, Release 3.0

Question No : 48

Service-Oriented Integration is based on creating a catalogue of SOA Services that expose existing capabilities from back-end systems. Which statement best describes how an SOA Service relates to the existing back-end systems?

A. Each SOA Service exposes the functionality from only a single back-end system to ensure the decoupling of SOA Services.
B. An SOA Service should expose the low-level interface of the back-end system to ensure that all back-end system capabilities are fully exposed.
C. An SOA Service should expose higher-level business capabilities by encapsulating the lower level Interfaces of the back-end systems.
D. Each SOA Service should expose only one isolated capability of the back-end systems to ensure isolation between SOA Service calls in composite applications.
E. All access to a back end system should be through a single SOA Service to ensure the back-end system will net become overloaded by service requests.
F. An SOA Service should connect to at least two back-end systems; otherwise the SOA Service is just duplicating the existing interface to the back-end system.

Answer: C

Explanation: The primary purpose of the Business layer in the architecture is to define and automate the

business processes external to, and independent of, the specific backend systems used in the organization. This isolates the business process from backend system changes, and conversely, isolates the backend systems from business process changes. De-coupling the business processes from the backend systems simplifies changes and maintenance for business processes and backend systems.

The Business layer generally provides the greatest and most measurable business value.

Reference: Oracle Reference Architecture, Service-Oriented Integration, Release 3.0

Question No : 49

You need to redesign your application to improve performance. The potential solution requires the data to be kept in memory for faster access. The in-memory data requires full support for SQL with BI queries and there is no need to scale out further. Which Oracle product would you choose to implement your solution?

A. Oracle Coherence
B. Oracle TimesTen
C. Oracle TUXEDO
D. Oracle VM

Answer: B

Explanation: Oracle TimesTen In-Memory Database (TimesTen) is a **full-featured, memory-optimized, relational database** with persistence and recoverability. It provides applications with the instant responsiveness and very high throughput required by database-intensive applications. Deployed in the application tier, TimesTen operates on databases that fit entirely in physical memory (RAM). Applications access the TimesTen database using standard SQL interfaces. For customers with existing application data residing on the Oracle Database, TimesTen is deployed as an in-memory cache database with automatic data synchronization between TimesTen and the Oracle Database.

Question No : 50

Which of the following statements about asset-centric engineering is true?

A. Project assets are maintained at each individual project level in an asset-centric engineering.
B. Asset-centric engineering promotes an integrated asset management approach in which assets are shared across the enterprise.
C. Asset-centric engineering uses multiple enterprise repositories to store and maintain the assets.
D. Asset-centric engineering requires that everything related to the assets,including metadata and payload, should be stored in the same repository.

Answer: D

Explanation: The underlying core principle of ORA Engineering is asset sharing and enterprise

development through an integrated asset management approach. Most organizations

use a Software Configuration Management (SCM) or Version Control System (VCS)

for managing the code and configuration assets. These tools are great for managing the

versioning of assets produced but they don't maintain the metadata of the assets.

Without metadata assets are not organized in context and it is hard to discover them.

ORA recommends an asset-centric engineering process, where

an Asset Manager is used to address the challenges posed by the traditional

approaches. The Asset Manager is typically an enterprise-scoped Metadata Repository

working in concert with SCMs and other types of asset repositories.

Reference: Oracle Reference Architecture,Software Engineering, Release 3.0

Question No : 51

Which statements are true with regard to authorization checks being done in the Mediation Layer?

A. Performing authorization checksin the Mediation Layer provides a centralized approach to securing SOA Services.
B. Performing authorization checks in the Mediation Layer requires that all secured SOA Services be accessed via the same protocol.
C. Performing authorization checks in the Mediation Layer requires that all secured SOA Services be accessed only via the Mediation Layer.
D. Performing authorization checks in the Mediation Layer eliminates the need for role-based authentication.
E. Performing authorization checks in the Mediation Layer requires that user authentication be based on username and password.

Answer: A,D

Explanation: Mediation is a key component in the overall architecture providing the decoupling
between consumers and providers.

A: Although not always required, leveraging the authorization capability within the Mediation Layer provides a centralized approach to securing SOA Services.

Note:
In addition to run time Service endpoint discovery, SOA infrastructure can provide additional value by acting as an intermediary and mediator between consumers and providers. For example, intermediaries can bridge the technology gaps between the two parties. Among their many capabilities are:
* Translate (map) security credentials between different users/groups/roles or between different credential types
* Translate, or transform request and response messages
* Accept requests via one transport or protocol and forward them on using a different transport or protocol (not B)
* Route messages based on content within the request message (Content-based routing)
* Route messages based on security policies
* Add or remove security measures such as encryption and certificates
* Invoke multiple Service providers as part of a single Service request
* Audit and/or log requests
* Deny requests based on access policies (SLAs, Usage Agreements)
* Capture response time metrics and usage metrics
* Monitor and report on error conditions

Reference: Oracle Reference Architecture, Service-Oriented Integration, Release 3.0

Question No : 52

Which of the following are types of policy considerations designed to affect the way privileges are assigned to users?

A. Principle of Alternating Privilege