QUESTIONS SELF-TEST JAVA EE

ARCHITECTURE

1. Java EE, the Java Enterprise Edition, is

O (a) an improved version of the Java Standard Edition for business professionals

O (b) a development environment, designed for creating enterprise applications

O (c) a platform for enterprise class level, distributed applications

O (d) a replacement of the Java Virtual Machine for running internet applications

2. Container services are configured via

O (a) special configuration methods in Java Access Beans

O (b) deployment descriptors

O (c) resource property files

O (d) application server administration configuration

3. Which of the following is NOT true

O (a) Java EE applications are based on 4 phases: development, assembly, deployment,

administration

O (b) Java EE applications are autonomic self-managing, self-healing, self-protecting enterprise

applications

O (c) Java EE applications are split up in multiple tiers: client tier, web tier, EJB tier and integration

tier

O (d) Java EE applications are typically a combination of application clients, web components

and EJBs

4. Which elements are not part of the Java EE specification (2 answers)

[\_] [a] applets

[\_] [b] Java Mail

[\_] [c] portlets

[\_] [d] Unified Expression Language

5. Which of the following descriptions of a Java EE web application are correct (2 correct answers)

[\_] [a] A Java EE web application may contain servlets and applets

[\_] [b] A Java EE web application may contain servlets and EJBs

[\_] [c] A Java EE web application may contain JavaServer Pages and JavaBeans

[\_] [d] A Java EE web application must contain JavaServer Pages and applets

6. JavaServer Faces

O (a) are a replacement of JavaServer Pages

O (b) are used as a facade for servlets and JavaServer Pages

O (c) is an MVC based web framework

O (d) is the new name of the Struts framework

7. Enterprise Java Beans

O (a) must be deployed in a Java EE web container

O (b) implement server side business components

O (c) are used as a replacement of a relational database

O (d) are necessary for the integration with enterprise services

8. Java Messaging Service (JMS)

O (a) allows messages to participate in a distributed transaction

O (b) enables the synchronous exchange of messages

O (c) is necessary for sending and receiving e-mails

O (d) is a non-standard Java EE feature of IBM WebSphere MQ

9. The best way to access a database from a standard Java EE application is

O (a) based on a dynamic lookup of a datasource via JNDI (Java Naming and Directory Interface)

O (b) using a JDBC DriverManager to optimize the connection to the database

O (c) working with static SQL statements via SQLJ

O (d) developing a customised persistency framework, based on JDBC type 1 drivers

10. Which quote illustrates best the support of web services in Java EE:

O (a) Java EE application servers contain a specific web services container to interact with

other web services

O (b) Java EE provides the required XML APIs and tools in order to quickly and effectively

design, develop, test and deploy web services

O (c) The web services support is part of the Java SE, and as such is available in Java EE too.

O (d) The Java EE server provides special deployment descriptors for web services

11. The use of a relational database in a Java EE environment is supported best by

O (a) Bean Managed Persistent Enterprise Entity Beans

O (b) POJO Entities with annotations and controlled by an implementation of the Java Persistence

Architecture

O (c) Container Managed Transactional beans with direct JDBC access

O (d) POJO beans and the specification of SQL in the EJB deployment descriptor

12. The EJB specification architecture defines (2 correct answers)

[\_] [a] Client side security and encryption

[\_] [b] Distributed object components

[\_] [c] Relational database components

[\_] [d] Transactional components

13. What type of enterprise bean is used to embody application processing state information?

O (a) javax.ejb.EnterpriseBean

O (b) javax.ejb.MessageBean

O (c) javax.ejb.SessionBean

O (d) javax.ejb.EntityBean

14. A Java EE Enterprise Application Archive (EAR) contains typically

O (a) client modules, web modules, EJB modules and resource adapters

O (b) EJB modules and the associated deployment descriptors

O (c) web modules and the associated deployment descriptors

O (d) all the deployment descriptors for the enterprise modules

15. Which quote about Java EE transaction management is NOT correct

O (a) Java EE transaction management supports distributed transactions with 2-phase commit

O (b) Java EE transaction management supports the Web services - Transaction specification

O (c) Java EE transaction management supports the flat transaction model

O (d) Java EE transaction management implies by default auto commit

16. Security in Java EE (2 correct answers)

[\_] [a] is provided by the Java EE containers

[\_] [b] requires the Java Authentication and Authorisation Service (JAAS) on the web tier

[\_] [c] is implemented as single sign-on feature, relying on an LDAP server

[\_] [d] is based on realms, users, groups and roles

17. Which pattern is NOT defined as a Java EE pattern (or Java EE blueprint)

O (a) Business Delegate

O (b) Decorator

O (c) Service to Worker

O (d) Data Access Object

**18)** Which is true? (Choose all that apply.)

A. "X extends Y" is correct if and only if X is a class and Y is an interface

B*.* "X extends Y" is correct if and only if X is an interface and Y is a class

C. "X extends Y" is correct if X and Y are either both classes or both interfaces

D. "X extends Y" is correct for all combinations of X and Y being classes and/or interfaces

**19)**. Given two files:

1. package pkgA;

2. public class Foo {

3. int a = 5;

4. protected int b = 6;

5. public int c = 7;

6. }

3. package pkgB;

4. import pkgA.\*;

5. public class Baz {

6. public static void main(String[] args) {

7. Foo f = new Foo();

8. System.out.print(" " + f.a);

9. System.out.print(" " + f.b);

10. System.out.print(" " + f.c);

11. }

12. }

What is the result? (Choose all that apply.)

A. 5 6 7

B. 5 followed by an exception

C. Compilation fails with an error on line 7

D. Compilation fails with an error on line 8

E. Compilation fails with an error on line 9

F. Compilation fails with an error on line 10

**20)** Given:

public abstract interface Frobnicate { public void twiddle(String s); }

Which is a correct class? (Choose all that apply.)

**A.** public abstract class Frob implements Frobnicate {

public abstract void twiddle(String s) { }

}

**B.** public abstract class Frob implements Frobnicate { }

**C.** public class Frob extends Frobnicate {

public void twiddle(Integer i) { }

}

**D.** public class Frob implements Frobnicate {

public void twiddle(Integer i) { }

}

**E.** public class Frob implements Frobnicate {

public void twiddle(String i) { }

public void twiddle(Integer s) { }

}

**21.** Given the following,

1. class X { void do1() { } }

2. class Y extends X { void do2() { } }

3.

4. class Chrome {

5. public static void main(String [] args) {

6. X x1 = new X();

7. X x2 = new Y();

8. Y y1 = new Y();

9. // insert code here

10. }

11. }

Which, inserted at line 9, will compile? (Choose all that apply.)

A. x2.do2();

B. (Y)x2.do2();

C. ((Y)x2).do2();

D. None of the above statements will compile