

Oracle

Exam 1z0-898

Java EE 6 Java Persistence API Developer Certified Expert Exam

Version: Demo

[Total Questions: 10]

Question No : 1

A developer who is designing entity classes to map a legacy database encounters a table called STUDENT_RECORD.

This table has two columns, STUDENT_ID and STUDENT_INFO_ID. The primary key of this table consists of both columns, and there is a unique constraint on each info column.

The STUDENT_ID column is foreign key to the STUDENT table and STUDENT_INFO_ID column is a foreign key to the STUDENT_DAT table.

What entity classes and relationships can the developer use to model these tables and relationship?(Choose two)

- A.** Model the student table as a student entity and STUDENT_DATA table StudentData entity. Model the STUDENT_RECORDS table as bidirectional many-to-many relationship between the student entity on the student data entity.
- B.** Model the STUDENT table as a Student entity and the STUDENT-DATA table as a StudentData entity. Model the STUDENT_RECORD table as a bidirectional one-to-one relationship between the student entity and the StudentData entity.
- C.** Model the STUDENT table as a Student entity and the STUDENT-DATA table as a StudentData entity. Model the Student-Records table as a student record entity. Create a many-to-one one relationship from the StudentRecord entity to the student entity and many-to-one relationship from the StudentRecord entity to the Student entity and many-to-one relationship from the student entity to the StudentData entity and one-to-many relationship from the StudentData entity to the StudentRecord entity.
- D.** Model the STUDENT table as a Student entity and the STUDENT-DATA table as a StudentData entity. Model the STUDENT-RECORD table as a StudentRecord entity. Create a bidirectional one-to-one relationship between the StudentRecord entity and bidirectional one-to-one relationship between the Student Record entity and the Student Data entity.

Answer: A,C

Question No : 2

The developer has defined the following entity class office:

```
@Entity
public class Office {
    @Id
    private int id;
    private String name;
    @OneToMany
    private List<Room> rooms;
}
```

Which of the following attributes will be in corresponding generated static metamodel class for the rooms' field?

- A. Public static volatile CollectionAttribute<Room> rooms;
- B. Public static volatile ListAttribute<Room> rooms;
- C. Public static volatile ListAttribute<Office, Room> rooms;
- D. Public static volatile SingleAttribute<Room> rooms;

Answer: C

Question No : 3

A developer wrote an entity class with the following method:

```
Private static Logger logger = Logger.getLogger ("myLogger");
```

```
@PrePersist
```

```
@PreUpdate
```

```
Public void doA () {
```

```
Logger.info ("A");
```

```
}
```

```
@PostPersist
```

```
@PostUpdate
```

```
Public void doB () {
```

```
logger.info ("B");
```

}

What will the log message contain when an application does the following?

1. Begins a transaction
2. Creates the entity
3. Persists the entity
4. Commits the transaction
5. Begins the entity data
6. Modifies the entity data
7. Merges the entity
8. Commits the second transaction

A. A

A

B

B

B. A

B

A

B

C. A

B

B

A

B

D. The application will throw an exception because multiple lifecycle callback annotations applied to a single method.

Answer: B

Question No : 4

An entity person is mapped to a table PERSON and has a collection-valued persistence field otherUsedNames that stores names used by a person. The other used Names field is mapped to a separate table called NAMES. Which code fragment correctly defines such

field?

- A. @ElementCollection (name = "NAMES")
Protected set<String> otherUsedNames = new HashSet ();
- B. @Element collection
@ElementTable (name = "NAMES")
Protected set<String> otherUsedNames = new HashSet ();
- C. @ElementCollection
@SecondaryTable (names = "NAMES")
Protected set<String> otherUsedNames = new HashSet ();
- D. @ElementCollection
@CollectionTable (names = "Names")
Protected set<String> otherUsedNames = new HashSet ();

Answer: D

Reference:<http://docs.oracle.com/javaee/6/api/javax/persistence/CollectionTable.html>

Question No : 5

Given two entities with many-to-many bidirectional association between them:

```
11. @Entity public class Employee {
12.     Collection projects;
13.     // more code here
14. }

and

11. @Entity public class Project{
12.     Set<Employee> emps;
13.     // more code here
14. }
```

What set of annotations correctly defines the association?

- A. @manyToMany on the projects field,
@manyToMany (mappedBy= "projects") on the emps field
- B. @manyToMany (mappedBy = emps) on the projects field,

@manyToMany on the emps field

C. @manyToMany (targetEntity = project.class) on the projects field,

@manyToMany (mappedBy = "projects") on the emps field

D. @manyToMany (targetEntity = Project.class) on the projects field,

@manyToMany on the emps field

Answer: C

Explanation: <http://uaihebert.com/jpa-manytomany-unidirecional-e-bidirecional/>

Question No : 6

Consider a persistence application with the following orm.xml:

```
<entity-mappings ... >
  <persistence-unit-metadata>
    <persistence-unit-defaults>
      <access> FIELD </access>
    </persistence-unit-metadata>
  </entity-mappings>
```

What will be the effect of the above orm.xml?

A. The access type for only those entities that have not explicitly specified @Access will be defaulted to field.

B. The access type for all entities in the persistence unit will be changed to FIELD.

C. The access type for all entities specified in this orm.xml will be changed to FIELD.

D. The access type for only those entities defined in this orm-xml for which access is not specified will be defaulted to FIELD.

Answer: D

Question No : 7

Given a set of CMT bean methods with the following transaction attributes:

Method M1 = SUPPORTS

Method M2 = REQUIRED

Method M3 = NOT_SUPPORTED

Method M4 = REQUIRES_NEW

And the following method invocation sequence:

Method M1 invokes Method M2

Method M2 invokes Method M3

Method M1 invokes Method M4

If Method M1 is invoked by a method that does NOT have a transaction context, which describes a possible scenario?

A. Method M1: nottransaction

Method M2: newtransaction

Method M3: nottransaction

Method M4: newtransaction

B. Method M1: nottransaction

Method M2: Container throws TransactionNotSupportedException

C. Method M1: nottransaction

Method M2: runs in same transaction as M1

Method M3: container throws TransactionNotSupportedException

D. Method M1: nottransaction

Method M2: newtransaction

Method M3: Container throws TransactionNotSupportedException.

Answer: A

Explanation: <http://docs.oracle.com/javaee/6/api/javax/ejb/TransactionAttributeType.html>

QUESTIONNO:34

Which EntityManager API will lock entity x with a pessimistic lock?

A. em.lock(x, LockModeType.WRITE)

B. em.lock(x, LockModeType.PESSIMISTIC)

C. em.lock(x, LockModeType.PESSIMISTIC_READ)

D. em.lock(x, LockModeType.OPTIMISTIC_FORCE_INCREMENT)

Answer:C

Reference:[http://www.objectdb.com/java/jpa/persistence/lock#Pessimistic_Locking_\(pessimisticlocking\)](http://www.objectdb.com/java/jpa/persistence/lock#Pessimistic_Locking_(pessimisticlocking))

QUESTIONNO:35

If a Persistence application locks entity x with a pessimistic lock, which statement is true?

- A. Persistence provider can defer obtaining the lock until the next synchronization of an entity to the database
- B. A Persistence provider will obtain the lock when the entity is refreshed from the database
- C. A Persistence provider is not required to support the LockModeType.PESSIMISTIC_WRITE locking type
- D. If a lock cannot be obtained, the Persistence provider must throw an exception

Answer:D

Reference:<http://www.eclipse.org/eclipselink/api/2.0/javax/persistence/LockModeType.html>

Explanation

:When the lock cannot be obtained, and the database locking failure results in transaction-level rollback, the provider must throw the PessimisticLockException and ensure that the JTA transaction or EntityTransaction has been marked for rollback.

QUESTIONNO:36

If a Persistence application locks entity x with a LockModeType.OPTIMISTIC_FORCE_INCREMENT lock type, which statement is true?

- A. The Persistence application must increment the version value prior to locking the entity.
- B. This operation will result in a PersistentLockException for a non-versioned object.
- C. This operation will result in a PersistentLockException if the version check fails.
- D. LockModeType.OPTIMISTIC_FORCE_INCREMENT is the synonym of the LockModeType.WRITE lock type.

Answer:D

Reference:<http://docs.oracle.com/javaee/6/tutorial/doc/gkjiu.html> (seventh row in the first table)

nthepage)

QUESTIONNO:37

PersistenceapplicationlocksentityxwithaLockModeType.PESSIMISTIC_READlocktype,whichstatementistrue?

- A.Thisoperationwillforceserializationamongtransactionsattemptingtoreadtheentitydata.
- B.ThisoperationwillresultinaTransactionRolledbackExceptionifthelockcannotbeobtained.
- C.Iftheapplicationlaterupdatestheentity,andthechangesareflushedtothedatabase,thelockwillbeconvertedtoanexclusivelock.
- D.LockModeType.PESSIMISTIC_READisthesynonymoftheLockModeType.READ.

Answer:C

QUESTIONNO:38

Auserentityisretrievedinaqueryandstoredinainstancevariableuser.Theuserentityhasasinglevaluednamepropertythatusesthemappingdefaults,andaphotoproperty,whichislazilyloaded.Theapplicationthencallsthefollowingmethod:

```
PersistenceUtil.isLoaded(user);
```

Whichtwoofthefollowingstatementsarecorrect?

- A.Thenamepropertywasloadedfromthedatabase.
- B.ThenamepropertywasNOTbeloadedfromthedatabase.
- C.Thenamepropertymayormaynothavebeenloadedfromthedatabase.
- D.Thephotopropertywasloadedfromthedatabase.
- E.ThephotopropertywasNOTloadedfromthedatabase.
- F.Thephotopropertymayormaynothavebeenloadedfromthedatabase.

Answer:A,F

Reference:<http://docs.oracle.com/javase/6/api/javax/persistence/PersistenceUtil.html>

<http://stackoverflow.com/questions/10437552/what-does-persistenceuntil-isloaded-means>

QUESTIONNO:39

Given the following entity classes:

```
@Entity
```

```
@cacheable(true)
```

```
Public class A {...}
```

```
@Entity
```

```
@cacheable(false)
```

```
Public class B {...}
```

```
@Entity
```

```
Public class C {...}
```

If the shared-cache-mode element of persistence.xml is set to ENABLE_SERVICE, which entities are cached when using a persistence provider that supports caching?

A. A only

B. A and B

C. A and C

D. A, B, and C

Answer: A

QUESTIONNO:40

An application has three entities: the mapped superclass person class entity, and the parent and child entities, which are subclasses of person.

The application has created four entity instances:

Person1 isa Person entity with a primary key of 50

Parent1 isa Parent entity with a primary key of 100

Child1 isa Child entity with a primary key of 400

Child2 isa Child entity with a primary key of 600

Caching has been enabled in the persistence unit, the persistence provider supports caching, and none of the entities have the Cacheable annotation applied, or a cacheable XML element in persistence.xml.

The application executes the following code:

```
Cache cache = ...;
```

```
Cache.evict(person.class)
```

```
Boolean result = cache.contains(Child.class, 400);
```

Assume there is no concurrent activity involving the cache. Which two statements are correct? (Choose two)

- A. Only person1 will be removed from cache.
- B. Person1, parent1, child1, and child2 will be removed from cache.
- C. Result is true
- D. Result is false

Answer: B, D

QUESTION NO: 41

A developer wants to ensure that an entity's data is up-to-date with regard to the database. Which of the following statements is guaranteed to accomplish this?

- A. Call EntityManager.refresh on the entity.
- B. Add @cacheable(false) annotation on the entity class.
- C. Call EntityManager.find on the entity.

D. Use an named query to retrieve the entity.

Answer:A

QUESTIONNO:42

An application has two entities, Department and Employee, and there is a one-to-many relationship between them. The application has the following query:

```
SELECT d
```

```
FROM Department d LEFT JOIN FETCH d.employees
```

```
WHERE d.name = :name
```

After receiving the results of the query, the application accesses the returned department's Employee entities stored in the Department.employees collection-valued attribute.

All caching has been turned off in the application.

Which statement is true?

A. The database will be accessed once during the query execution phase, and once for each Employee entity in Department.employees.

B. The database will be accessed once during the query execution phase ONLY.

C. The database will be accessed once during the query execution phase, and once when the department.employees collection-valued attribute is used.

D. The database will be accessed once during the query execution phase, once when the Department.employees collection-valued attribute is used, and once for each employee entity in the Department.employees.

Answer:B

QUESTIONNO:43

An application creates a TypedQuery object to perform a query, and sets the query object's flush mode by calling setFlushMode(FlushModeType.commit). The query is executed within a transaction.

Which of the following is true?

- A. Updates to the database tables may occur any time during the transaction associated with the query.
- B. Updates to the entities that can affect the outcome of the query cannot be flushed to the database until the transaction commits.
- C. Changes to the entities in this transaction cannot be flushed to the database until the transaction commits.
- D. `setFlushMode` cannot be called on a `TypedQuery` object.

Answer: A

QUESTION NO: 44

A developer needs to include a set of managed classes in a persistence unit. Which two solutions are correct? (Choose two.)

- A. Place the class files in the `orm.xml` file.
- B. Place the class files in the root of the persistence unit.
- C. Place the class files in any mapping file that is included on the classpath.
- D. Place the class files in any jar on the classpath that is included in the persistence unit.

Answer: B, D

Reference: <https://cwiki.apache.org/GMOxDOC21/persistence.xml.html> (Topic: <class>)

QUESTION NO: 45

Consider the following web application:

Here `MyEntity1.class` and `MyEntity2.class` are annotated with `@Entity` and `MyEmbeddable1.class` and `MyEmbeddable2.class` are annotated with `@Embeddable`. `MyPU` is container managed. Which of the following represents a set of classes considered managed by `MyPU`?

- A. MyEntity1, and MyEmbeddable1
- B. MyEntity1, MyEmbeddable1, MyEntity2, and MyEmbeddable2
- C. MyEntity1, MyEmbeddable1, and MyEntity2
- D. MyEntity1 and MyEntity2

Answer: B

QUESTIONNO: 46

Consider a persistence application with the following entity:

```
@Entity
```

```
public class MyEntity {
```

```
    @Column(name="FIELD_A_COLUMN")
```

```
    int fieldA;
```

```
    int fieldB;
```

```
    int fieldC;
```

```
    int fieldD;
```

An orm.xml is packaged in the application with the following contents:

Which two of the following statements are true? (Choose two)

- A. fieldA is mapped to column FIELD_A
- B. fieldB is mapped to column NEW_COLB
- C. fieldD is a persistent attribute of MyEntity
- D. fieldD is not a persistence attribute of MyEntity

Answer: B, C

QUESTIONNO:47

A developer wants to write a type-safe Criteria API query. Which two of the following statements are true about Criteria query roots? (Choose two)

- A. The query MUST define a query root.
- B. The query MUST define a query root only if it navigates to related entities.
- C. The query MUST NOT define multiple query roots.
- D. The query may define multiple query roots.

Answer: B, D

Reference: <http://docs.oracle.com/cd/E19798-01/821-1841/gjiv/index.html>

QUESTIONNO:48

Which of the following Criteria query snippets demonstrates the correct way to create and execute a typed query? Assume that cb references an instance of the CriteriaBuilder interface and em references an EntityManager instance.

A. `CriteriaQuery<office> cq = cb.createQuery(Office.class);`

...

`TypedQuery<Office> tq = em.createQuery(cq);`

`List<office> offices = tq.getResultList();`

B. `CriteriaQuery cq = cb.createQuery(Office.class)`

...

`TypedQuery<office> tq = em.createQuery(cq, office.class);`

`List<office> offices = tq.getResult();`

C. `CriteriaQuery<office> cq = em.createQuery(cq, office.class);`

...

`TypedQuery<Office> tq = em.createQuery(cq);`

```
List<office>offices=tq.getResult();
```

```
D.CriteriaQuery<office>cq=cb.createQuery(Office.class);
```

```
...
```

```
TypedQuery<Office>tq=em.ceateQuery(cq);
```

```
List<office>Offices=tq.getResultList();
```

Answer:D

Reference:<http://stackoverflow.com/questions/3424696/jpa-criteria-api-how-to-add-join-clause-as-general-sentence-as-possible>

QUESTIONNO:49

A developer is writing an application with three Java Persistence API entities: order, customer, and Address. There is a many-to-one relationship between order and customer, and a one-to-many relationship between customer and Address.

Which two Criteria queries will return the orders of all customers who have an address whose value is specified by the String parameter postalCode? (Choose two)

A. String postalCode=...

CriteriaBuilder cb=...

```
CriteriaQuery<order>cq=cb.createQuery(Order.class);
```

```
Root<order>order=cq.from(order.class);
```

```
Join<order, Customer>customer=order.join(Order_.customer);
```

```
Root<Order>order=cq.from(Order.class);
```

```
Join<customer, Address>address=customer.join(Order_.customer)
```

```
cq.where(cb.equal(address.get(Address_.postalCode), postalCode));
```

```
cq.select(order).Distinct(true);
```

```
//query execution code here
```

```
...
```


B.StringpostalCode=...

CriteriaBuildercb=...

```
Root<Order>order=cq.from(Order.class);
```

```
order.join(order_.customer).join(Customer_.addresses);
```

```
cq.where(cb.equal(address.get(Address_.postalCode),postalCode));
```

```
cq.select(order).Distinct(true);
```

```
//queryexecutioncodehere
```

C.StringpostalCode=...

CritetiaBuildercb=...

```
Root<order>order=cq-from(Order.class),
```

```
Join<order,Address>address=order.join(Customer_.addresses);
```

```
cq.where(ct>.equal(address.get(Address_.postalCode),postalCode));
```

```
cq-select(order).distinct(true);
```

```
//queryexecutioncodehere
```

...

D.StringpostalCode=...

CriteriaBuildercb=...

```
Root<order>order=cq-from(Order.class),
```

```
Join<order,Address>address=order.join(Order_.customer)-join(Customer_.addresses);
```

```
cq.where<cb.equal(address.get(Address_.postalCode),postalCode));cq.selec:(order).distinct(true);
```

```
//queryexecutioncodehere
```

...

Answer:A,B

Which one of the following queries selects the customer whose order has the highest total price?

A. CriteriaBuilder cb = ...

```
CriteriaQuery<Customer> cq = cb.createQuery(Customer.class);
```

```
Root<Customer> c = cq.from(Customer.class);
```

```
Join<Customer, Order> o = c.join(Customer_.orders);
```

```
cq.select(c).distinct(true);
```

```
Subquery<Double> sq = cq.subquery(Double.class);
```

```
Root<Order> subo = cq.correlate(o);
```

```
sq.select(cb.max(subo.get(Order_.totalPrice)));
```

```
cq.where(cb.equal(o.get(Order_.totalPrice), cb.all(sq)));
```

B. CriteriaBuilder cb = ...

```
CriteriaQuery<Customer> cq = cb.createQuery(customer.class)
```

```
Root<Customer> c = cq.from(Customer.class);
```

```
Join<Customer, Order> o = c.join(Customer_.orders);
```

```
cq.select(c).distinct(true);
```

```
Subquery<Double> sq = cq.subquery(Double.class);
```

```
Root<Order> subo = cq.correlate(o);
```

```
sq.select(cb.max(subo.get(Order_.totalPrice)));
```

```
cq.where(cb.equal(o.get(Order_.totalPrice), cb.all(sq)));
```

C. CriteriaBuilder cb = ...

```
CriteriaQuery<Customer> cq = cb.cteateQuery(Customer.class);
```

```
Root<Customer> c = cq.from(Customer.class);
```

```
Join<Customer, Order> o = c.join(Customer_.orders);
```

```
cq.select(c).distinct(true);
```

```
Subquery<Double> sq = cq.subquery(Double.class);
```

```
Root<Order>subo=cq.correlate(o);  
sq.select(cb.max(subo.get(Order_.totalPrice)));  
cq.where(cb.equal(o.get(Order_.totalPrice),cb.all(sq)));
```

D.CriteriaBuildercb=...

```
CriteriaQuery<Customer>cq=cb.createQuery(Customer.class);  
Root<Customer>c=cq.from(Customer.class);  
Join<Customer,Order>o=c.join(Customer_.orders);  
cq.select(c).distinct(true);  
Subquery<Double>sq=cq.subquery(Double.class);  
Root<Order>subo=sq.from(Order.class);  
sq.select(ci::max(subo.get(Order_.TotalPrice)));  
cq.where(sq.all(o.get(Order_.totalPrice)));
```

Answer:D

QUESTIONNO:51

The developer wants to write a criteria query that will return the number of orders made by customer of each county.

Assume that customer is an entity with a unidirectional one-to-many relationship to the Order entity and that Address is an embeddable class, with an attribute country of type String.

Which one of the queries below correctly achieves this?

A.CriteriaBuildercb=>=...

```
CriteriaQuerycq=cb.createQuery();  
Root<Customer>c=cq.from(Customer.class);  
Join<Customer,Order>o=c.join(Customer_.orders);  
cq.multiselect(cb.count(o),c.get(customer_.address.get(address_.country))
```

```
cq.groupBy(c.get(customer_.address).get(address_.country))
```

B.CriteriaBuildercb>=...

```
CriteriaQuerycq=cb.createQuery();
```

```
Root<Customer>c=cq.from(Customer.class);cq.select(cb.count(c.join
```

```
(customer_.Orders)),c.get(customers(0),c.get(customer_.address).get(Address_'country));
```

```
(c.get(Customer_.address).get(address_.country));
```

C.CriteriaBuildercb>=...

```
CriteriaQuerycq=cb.createQuery();
```

```
Root<Customer>c=cq.from(Customer.class);
```

```
Join<Customer,Order>o=c.join(Customer_.orders);
```

```
cq.select(cb.count(o));
```

```
cq.groupBy(c.get(Customer___.address)-get(Address_.country));
```

D.CriteriaBuildercb=...

```
CriteriaQuerycq=cb.createQueryO;
```

```
Root<Customer>c=cq.from(Customer.class);
```

```
Root<Customer>c=cq.from(Customer.class),-
```

```
Join<Customer,Order>o=c.join(Customer_.orders);
```

```
Join<Address,String>country=c.join(Customer,_.address).join(Address
```

```
cq.multiselect(cq.count(o),country);
```

```
cq.groupBy(c.get(Customer.address)-get(Address_.country));
```

Answer:A

Reference:<http://www.jarvana.com/jarvana/view/org/apache/openjpa/openjpa-persistence-jdbc/2.0.0/openjpa-persistence-jdbc-2.0.0-test-sources.jar!/org/apache/openjpa/persistence/criteria/TestTypesafeCriteria.java?format=ok>

The developer wants to write a portable criteria query that will order the orders made by customer James Brown according to increasing quantity. Which one of the below queries correctly accomplishes that task?

A. CriteriaBuilder cb = ...

```
CriteriaQuery<Order> cq = cb.createQuery<Order.class>
```

```
Root<Customer, Order> r = cq.from(Customer.class);
```

```
Join<Customer, Order> j = r.join(Customer_.orders);
```

```
cq.where(cb.equal(c.get(Customer_.name), JamesBrown));
```

```
cq.orderBy(r.get(Order_.quantity));
```

B.

CriteriaBuilder cb = ...

```
CriteriaQuery<Order> cq = cb.createQuery<Order.class>
```

```
Root<Customer, Order> r = cq.from(Customer.class);
```

```
Join<Customer, Order> j = r.join(Customer_.orders);
```

```
cq.where(cb.equal(c.get(Customer_.name), JamesBrown)); cq.select(r);
```

```
cq.orderBy(r.get(Order_.quantity));
```

C. CriteriaBuilder cb = ...

```
CriteriaQuery<Order> cq = cb.createQuery<Order.class>
```

```
Root<Customer, Order> r = cq.from(Customer.class);
```

```
Join<Customer, Order> j = r.join(Customer_.orders);
```

```
cq.where(cb.equal(c.get(Customer_.name), JamesBrown));
```

```
cq.orderBy(r.get(Order_.quantity));
```

```
cq.select(r);
```

D. CriteriaBuilder cb = ...

```
CriteriaQuery<Order> cq = cb.createQuery<Order.class>
```

```
Root<customer,order>0=cq.from(customer.class);  
Join<customer,order>0=c.Join(customer-.orders);  
cq.where(cb.equal(c.get(customer_.name,JamesBrown)));  
cq.orderBy(0.get(order_.quantity));  
cq.orderBy("quantity");
```

Answer:C

QUESTIONNO:53

An application has two entities, person and Address.

The application calls the DeletePersonsByStatus named query.

Which of the following is true?

- A. The person entities are removed, but NOT their related address entities.
- B. The person entities, and all their related address entities, are removed.
- C. The DeletePersonsByStatus named query is ill-formed, and will be rejected by the persistence provider.
- D. The named query will fail.

Answer:A

<http://stackoverflow.com/questions/4275291/hibernate-doesnt-remove-child-with-named-query-but-removes-with-session-delete>

QUESTIONNO:54

An application uses optimistic locking by defining version attributes in its entity classes. The application performs a bulk update of the entities using a JPQL query.

Which of the following is correct?

- A. The persistence provider will ensure that the version value in each table is updated.
- B. The persistence provider will create a new transaction for the bulk update.
- C. An `OptimisticLockException` will be thrown by the persistence provider.
- D. The value of the `Version` attributes of the updated entities should be explicitly updated by the query.

Answer: D

Reference: [http://en.wikibooks.org/wiki/Java_Persistence/Locking\(topic:optimisticlocking,secondparagraph\)](http://en.wikibooks.org/wiki/Java_Persistence/Locking(topic:optimisticlocking,secondparagraph))

QUESTION NO: 55

An named query that sets an exclusive pessimistic lock on the entities returned by the query by setting the `NamedQueryLockModeElement` to `LockModeType.PESSIMISTIC_FORCE_INCREMENT`. The application starts a transaction and executes the query.

Which of the following statements is correct about the entities returned by the query?

- A. Only the current transaction may modify or delete the entity instances.
- B. The current transaction may NOT modify or delete the entity instances.
- C. Other concurrent transactions may modify or delete the entity instances.
- D. Other concurrent transactions may modify but MAY NOT delete the entity instances.

Answer: A

QUESTION NO: 56

A developer wants to create a Java Persistence query that will include a subquery.

Which three are true? (Choose three.)

- A. Subqueries can be used in a `FROM` clause.
- B. Subqueries can be used in a `WHERE` clause.
- C. The `ANY` expression can be used only with a subquery.

D. The EXISTS expression can be used only with a subquery.

E. The MEMBER expression can be used only with a subquery.

Answer: B, C, D

QUESTIONNO:57

Which statement is correct about the Java Persistence API support for the SQL queries?

A. SQL queries are NOT allowed to use parameters.

B. The result of an SQL query is not limited to entities.

C. Only SELECT SQL queries are required to be supported.

D. SQL queries are expected to be portable across databases.

Answer: B

QUESTIONNO:58

A user entity is in a one-to-many relationship with a Book entity. In other words, a developer reaches the collection of books that a user instance myUser has by using the path expression "myuser-books".

A developer wants to write a Java Persistence query that returns all users that have only two books.

Which two are valid queries that return this information? (Choose two.)

A. `SELECT u FROM User u WHERE SIZE(u.books)=2`

B. `SELECT u FROM User u WHERE COUNT(u.books)=2`

C. `SELECT u FROM User u (WHERE COUNT(b) FROM u.books b)=2`

D. `SELECT u FROM User u WHERE (SELECT SIZE(b) FROM u.books b)=2`

Answer: A, C

QUESTIONNO:59

A session bean business method invokes `UserTransaction.setRollbackOnly` and receives an `IllegalStateException`.

Under which circumstance can this happen?

- A. The bean is using bean-managed transactions regardless of whether there is an active transaction.
- B. There is no circumstance that would cause `setRollbackOnly` to throw an `IllegalStateException`.
- C. The bean is using bean-managed transaction demarcation, and `UserTransaction.begin` has been invoked.
- D. The `setRollbackOnly` method is invoked within a bean-managed transaction, and `UserTransaction.commit` has NOT been invoked.

Answer: A

<http://docs.oracle.com/javaee/6/api/javax/ejb/EJBContext.html#setRollbackOnly%28%29>

QUESTION NO: 60

A Java EE application is packaged as follows.

Which of the following is true for a portable Java EE application?

- A. This is an invalid application. A Java EE application cannot have more than one persistent with a name.
- B. "MyPu" defined under each module is visible to only the defining module. There is no way other modules can access it.
- C. Code in the `ejb1.jar` can access "MyPU" defined under `war1.war` using "war1#myPU"

Answer: B

QUESTION NO: 61

The developer has modeled student interests as a `set<String>`:

```
@Entity public class Student {
```

```
@IdintstudentId;  
  
stringname;  
  
@ElementaryCollection  
Set<String>Interests;  
  
...  
}
```

The developer wants the values of this set to be stored using a column named `student_interests`.

Select the item below that accomplishes this task:

A. `@ElementaryCollection`

```
@Column(name="student_interests")
```

```
Set<string>interests;
```

B. `@ElementaryCollection(column="student_interests")Set<String>interests;`

C. `@ElementaryCollection@CollectionTable(column="student_interests")Set<String>interests;`

D. `@ElementaryCollection@CollectionTable(column=@column(name="student_interests"))Set<String>interests;`

Answer: A

Reference: [http://en.wikibooks.org/wiki/Java_Persistence/ElementCollection\(seeExampleofaelementcollectionrelationshipptoabasicvalueannotations\)](http://en.wikibooks.org/wiki/Java_Persistence/ElementCollection(seeExampleofaelementcollectionrelationshipptoabasicvalueannotations))

QUESTION NO: 62

The embeddable class `ContractInformation` is used in an element collection of the `Employee` entity.

```
@Entity
```

```
Public class Employee{
```

```
@IdintempId;
```

```
@ElementaryCollectionSet<ContractInformation>info;
```

```
...
```

```
}
```

Assume that the phone class is an entity and that address is an embedded class.

Which two of the code segments below can be used to model the state of ContractInformation? (Choose two)

- A. @OneToManySet<phone>phones;
- B. @EmbeddableAddress address;
- C. @ManyToOne phone phone;
- D. @ElementaryCollection<Phone>phones;
- E. @OneToOneAddress address;

Answer: B, C

QUESTION NO: 63

If a Persistence application locks entity x with a pessimistic lock, which statement is true?

- A. The Persistent provider will lock the database row(s) that correspond to all persistent fields of properties of an instance, including element collections.
- B. Only single table per class hierarchy mapping is supported with this lock type.
- C. A Persistence provider will lock the entity relationships for which the locked entity contains the foreign key.
- D. A separate lock statement must be called for each subclass in entity hierarchy.

Answer: C

Reference: [http://docs.oracle.com/javaee/6/api/javax/persistence/PessimisticLockScope.html\(searchpublicstaticfinalpessimisticlockscope\)](http://docs.oracle.com/javaee/6/api/javax/persistence/PessimisticLockScope.html(searchpublicstaticfinalpessimisticlockscope))

Question No : 8

Given:

```
11. @PersistenceContext EntityManager em;
12. public boolean test(Order o) {
13.     boolean b = false;
14.     o = em.merge(o);
15.     em.remove(o);
16.     o = em.merge(o);
17.     b = em.contains(o);
18.     return b;
19. }
```

Which statement is correct?

- A. The method will return TRUE.
- B. The method will return FALSE.
- C. The method will throw an exception.
- D. The order instance will be removed from the database.

Answer: C

Question No : 9

The developer wants to override the default mappings for an embeddable class Address used by the customer entity.

The Address class is defined as follows:

```
@Embeddable public class Address (
private String street;
private String city;
private String country;
...
)
```

Assume that NO mapping descriptor is present. Which code segment below shows the correct way to override the default mapping for address?

- A.** @AttributeOverrides ({
@AttributeOverride (name = "street", column = @Column (name = ADDR_STREET)),
@AttributeOverride (name = "city, column = @Column (name = ADDR_CITY)),
@AttributeOverride (name = "country, column = @Column (name = ADDR_COUNTRY)),
})
@Embedded Address addr;
- B.** @ AttributeOverrides ({
@AttributeOverride (name = "street", column = @Column (name = "name_STREET")),
@AttributeOverride (name = "city, column = @Column (name = "name_CITY")),
@AttributeOverride (name = "country, column = @Column (name = "name_COUNTRY")),
})
@Embedded Address addr;
- C.** @ AttributeOverrides ({
@AttributeOverride (name = "street", column (name = "name_STREET")),
@AttributeOverride (name = "city, column (name = "name_CITY")),
@AttributeOverride (name = "country, column (name = "name_COUNTRY")),
})
@Embedded Address addr;
- D.** @AttributeOverrides ({
@AttributeOverride (name = "addr.street", column = @Column (name = ADDR_STREET)),
@AttributeOverride (name = "addr.city", column = @Column (name = ADDR_CITY)),
@AttributeOverride (name = "addr.country", column = @Column (name =
ADDR_COUNTRY)),
})
@Embedded Address addr;

Answer: B

Reference:<http://docs.oracle.com/javaee/5/api/javax/persistence/AttributeOverrides.html>

Question No : 10

An application wants to utilize side effects of cascading entity manager operations to related entities.

Which statement is correct?

- A.** The persist operation is always cascaded to related entities for one-to one and one-to-many relationships.
- B.** To minimize the effect of the remove operation applied to an entity participating in a many-to-many relationship the remove operation should be cascaded to entities on both sides of the relationship.
- C.** The persist operation applied to a new entity x is cascaded to entities referenced by x if the relationship from x to these other entities is annotated with the cascade=PERSIST or cascade=ALL annotation element value.
- D.** The remove operation applied to a removed entity x is cascaded to entities referenced by x if the relationship from x to these other entities is annotated with the cascade = REMOVE or cascade = ALL annotation element value.

Answer: C

Reference:<http://stackoverflow.com/questions/4748426/cannot-remove-entity-which-is-target-of-one-to-one-relation>(answer 1)