



Exam Code: 1D0-441

Exam Name: CIW DATABASE SPECIALIST

Vendor: CIW

Version: DEMO

Part: A

1: A foreign key maps to a:

- A.prime key.
- B.indirect key.
- C.parent key.
- D.composite key.

Correct Answers: C

2: Consider the relation shown in the exhibit. Which of the following SQL statements would properly add information for a new employee?

Emp_ID	First_Name	Last_Name	Birth_Date
0001	Helen	Lee	12-05-75
0002	James	Smith	10-25-76
0003	Eliza	Perez	02-15-80
0004	Samuel	Hayes	11-07-71

Employee Relation

- A.INSERT INTO Employee
VALUES(0005, Tim, Bogart, 03-15-77);
- B.INSERT INTO Employee(Emp_ID, First_Name, Last_Name, Birth_Date)
VALUES(0004, Tim, Bogart, 03-15-77);
- C.INSERT INTO Employee(Emp_ID, First_Name, Last_Name, Birth_Date)
VALUES(0005, Tim, Bogart, 03-05-77);
- D.INSERT INTO Employee (Emp_ID, First_Name, Last_Name, Birth_Date)
VALUES (0005, Tim, Bogart, 03-05-77);

Correct Answers: D

3: Which pair of relational algebraic operations requires union compatibility?

- A.Union and join
- B.Selection and projection
- C.Intersection and difference
- D.Cartesian product and intersection

Correct Answers: C

4: Which static member of the ResultSet class should be used to create an updatable result set?

- A.ResultSet.TYPE_FORWARD_ONLY
- B.ResultSet.TYPE_FORWARD_UPDATABLE
- C.ResultSet.TYPE_SCROLL_INSENSITIVE
- D.ResultSet.TYPE_SCROLL_SENSITIVE

Correct Answers: D

5: Which method of the Statement interface could be used to delete data from a database?

- A.executeUpdate
- B.executeQuery
- C.close
- D.clearBatch

Correct Answers: A

6: Which JDBC interface is used to extract information about the database schema?

- A.ResultSet
- B.Connection
- C.DatabaseMetaData
- D.ResultSetMetaData

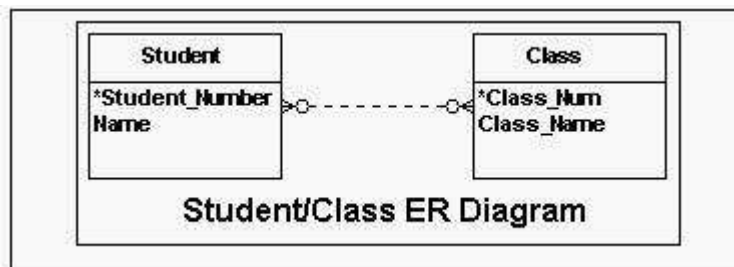
Correct Answers: C

7: Which of the following statements is true of the Connection interface?

- A.Each JDBC client application must provide a class that implements the Connection interface.
- B.Each JDBC driver provides a class that implements the Connection interface.
- C.Each JVM provides a class that implements the Connection interface.
- D.The Connection interface can be used to load a JDBC driver.

Correct Answers: B

8: Consider the Entity-Relation diagram shown in the exhibit. When the logical database design phase is completed, which of the following is a valid DDL description of the base relations for the Entity-Relation diagram?



- A.STUDENT(
Student_Number: integer NOT NULL
Name: variable length character string length 20 NOT NULL)
Primary Key Student_Number
CLASS(
Class_Num: integer NOT NULL
Class_Name: integer NOT NULL)
Primary Key Class_Num
- B.STUDENT(
Student_Number: integer NOT NULL
Name: variable length character string length 20 NOT NULL)
Primary Key Student_Number
CLASS(
Class_Num: integer NOT NULL

Class_Name: integer NOT NULL)
 Primary Key Class_Num
 Foreign Key Class_Num References STUDENT
 C.STUDENT(
 Student_Number: integer NOT NULL
 Name: variable length character string length 20 NOT NULL)
 Primary Key Student_Number
 STU_CLASS(
 Student_Number: integer NOT NULL
 Class_Num: integer NOT NULL)
 Primary Key Student_Number
 CLASS(
 Class_Num: integer NOT NULL
 Class_Name: integer NOT NULL)
 Primary Key Class_Num
 D.STUDENT(
 Student_Number: integer NOT NULL
 Name: variable length character string length 20 NOT NULL)
 Primary Key Student_Number
 STU_CLASS(
 Student_Number: integer NOT NULL
 Class_Num: integer NOT NULL)
 Primary Key Student_Number, Class_Num
 CLASS(
 Class_Num: integer NOT NULL
 Class_Name: integer NOT NULL)
 Primary Key Class_Num

Correct Answers: D

9: What is the highest normal form of the relation(s) shown in the exhibit?

Teacher_ID	Teacher_Name	Dept_Code	Office_No	Teacher_Aide	Dept_Phone
A12	M. Smith	Acc	A234	T. Juarez	555-1375
E32	L. Rodriguez	Eco	E781	L. James	555-7402
M34	Y. Yee	Math	M442	J. Daye	555-2345
S29	H. Huan	Sci	S301	R. Nguyen	555-8945
A15	M. Chang	Acc	A257	T. Juarez	555-1375
E42	T. Colton	Eco	E331	L. James	555-7402
M74	R. Perez	Math	M662	J. Daye	555-2345

Teacher Relation

- A.Boyce-Codd normal form
- B.First normal form
- C.Second normal form

D.Third normal form

Correct Answers: C

10: Consider the following domain description:

domain Student_ID: integer

domain Grade: fixed length character string length 1

To meet business needs, you must add enterprise constraints to this domain description. The Student_ID should always be a positive integer. The initial value of Student_ID should be 0 (zero) to indicate that a valid ID number has not been assigned. The Grade should be limited to the letters A through F. Which SQL statements would perform these tasks?

A.CREATE DOMAIN Student_ID AS INTEGER

DEFAULT 0

CHECK (Student_ID > -1);

CREATE DOMAIN Grade AS CHAR(1);

CHECK (Student_ID IN ('A','B','C','D','E','F'));

B.CREATE DOMAIN Student_ID AS INTEGER

CHECK (Student_ID > -1);

CREATE DOMAIN Grade AS CHAR(1);

DEFAULT NULL

CHECK (Student_ID IN ('A','B','C','D','E','F'));

C.CREATE DOMAIN Student_ID AS INTEGER;

CREATE DOMAIN Grade AS CHAR(1);

CONSTRAINT ENTERPRISE CHECK;

D.CREATE TABLE ENTERPRISE (

Student_ID INTEGER NULL

Grade VARCHAR(1) NOT NULL,

CONSTRAINT ENTERPRISE CHECK;

Correct Answers: A

11: Assuming that conn references a valid and open connection to the database, which code segment will insert values into the Employees relation?

A.conn.executeUpdate

(INSERT INTO Employees VALUES +

(1001, 'Karen Hughes', 55000));

B.Statement s = conn.createStatement();

s.executeUpdate(INSERT INTO Employees VALUES +

(1001, 'Karen Hughes', 55000));

C.Statement s = conn.createStatement();

s.executeQuery(INSERT INTO Employees VALUES +

(1001, 'Karen Hughes', 55000));

D.Statement s = new Statement();

s.executeUpdate(INSERT INTO Employees VALUES +

(1001, 'Karen Hughes', 55000));

Correct Answers: B

12: Which term describes one or more database operations that are executed as a single unit?

A.Update

B.Transaction

C.Encapsulation

D.Operational group

Correct Answers: B

13: What is the highest normal form of the relation(s) shown in the exhibit?

A.Second normal form

B.Third normal form

C.No normal form

D.First normal form

Correct Answers: C

14: Consider the following SQL statement:

```
SELECT *
```

```
FROM Orders
```

```
WHERE Order_Date LIKE %02
```

```
ORDER BY Sales_Rep_No, Amount DESC;
```

Using the Orders Relation shown in the exhibit, which of the following tables shows the result of this SQL statement?

A.Exhibit Option A

B.Exhibit Option B

C.Exhibit Option C

D.Exhibit Option D

Correct Answers: B

15: Consider the following stored procedure:

```
CREATE PROCEDURE showFees
```

```
AS
```

```
SELECT Fee
```

```
FROM ACTIVITY
```

```
WHERE Fee > 0
```

Which Java code segment will correctly utilize this stored procedure?

A.CallableStatement cs =

```
conn.prepareCall({call showFees});
```

```
ResultSet rs = cs.executeQuery();
```

B.CallableStatement cs =

```
conn.prepareCall({call showFees});
```

```
ResultSet rs = cs.execute();
```

C.PreparedStatement ps =

```
conn.prepareStatement(SELECT Fee +
```

```
FROM ACTIVITY +
WHERE Fee > 0);
ResultSet rs = cs.execute();
D.PreparedStatement ps =
conn.prepareStatement(SELECT Fee +
FROM ACTIVITY +
WHERE Fee > 0);
ResultSet rs = cs.execute();
```

Correct Answers: A

16: Which Statement interface methods are used to execute a SQL select query?

- A.executeUpdate and close
- B.executeUpdate and execute
- C.executeQuery and execute
- D.executeUpdate and executeQuery

Correct Answers: C

17: What is the purpose of the batch update feature in JDBC 2.0?

- A.To reduce processing time
- B.To enable transaction processing
- C.To provide enhanced security
- D.To generate result sets

Correct Answers: A

18: With regard to databases, what is normalization?

- A.The process of reducing the cardinality of a relation
- B.The process of organizing and refining relations
- C.The process of duplicating data to reduce the number of tables
- D.The process of limiting data stored in a table to a specific range of values

Correct Answers: B

19: Consider the Information Engineering diagram in the exhibit showing the relations BUILDING and RESIDENT. What is the relationship between BUILDING and RESIDENT?

- A.1:1
- B.1:N
- C.N:1
- D.M:N

Correct Answers: B

20: Consider the relations shown in the exhibit. Due to restructuring, the Sales department has been eliminated and the employees working in that department have been dismissed. All ID information is stored as integers. Which SQL statement would be used to return a relation with all information for the employees who have been dismissed?

A.SELECT *

FROM Employee;

B.SELECT ID, Last_Name

FROM Employee;

WHERE ID = 0004;

C.SELECT *

FROM Employee;

WHERE Dept_ID = 022;

D.SELECT *

FROM Employee

WHERE Dept_ID = 022;

Correct Answers: C