**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.
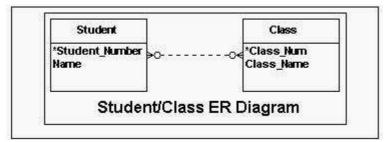B.Each JDBC driver provides a class that implements the Connection interface.
C.Each JVM provides a class that implements the Connection interface.
D.The Connection interface can be used to load a JDBC driver.
**Correct Answers: B**


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 DBDL description of the base relations for the Entity-Relation diagram?



Student/Class ER 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.execute(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**