**Exam Code:** 000-733

**Exam Name:** IBM Certified Application Developer - DB29

Vendor: IBM

Version: DEMO

## Part: A

1: A .NET application executes a SQL request invoking the DB2Command.ExecuteReader method and a syntax error exception is thrown. Which of the following properties contains the SQLCode for this syntax error?

A.DB2Error.SQLCode

B.SQLError.SQLCode

C.DB2Exception.SQLCode

D.SQLException.SQLCode

**Correct Answers: A** 

2: Given the following table definition:

CREATE TABLE staff (

id SMALLINT NOT NULL,

name VARCHAR(9),

dept SMALLINT,

job CHAR(5))

Assuming that the following statements execute successfully:

Dim cmdStaff As DB2Command = cnDb2.CreateCommand()

cmdStaff.CommandText = "SELECT name FROM staff WHERE (job = @job)"

Which of the following is the correct way to provide a value for the parameter marker used?

A.cmdStaff.Parameters.Add("@job", "Mgr", CType(5, Char))

B.cmdStaff.Parameters.Add("@job", "Mgr", DB2Type.Char, 5)

C.cmdStaff.Parameters.Add(New DB2Parameter("@job", CType(5, Char))

cmdStaff.Parameters("@job").Value = "Mgr"

D.cmdStaff.Parameters.Add(New DB2Parameter("@job", DB2Type.Char, 5)

cmdStaff.Parameters("@job").Value = "Mgr"

**Correct Answers: D** 

3: If the following code is executed in the order shown:

conDB2 As DB2Connection

conDB2. Connection String = "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; PWD = db2pwd; "Database = samplelx; UID = db2user; "Database = samplelx; UID = db2user; "Database = samplelx; UID = db2user; "Database = samplelx; "

conDB2.Open()

Which of the following statements is correct?

A.An exception is thrown because the server name has not been specified.

B.An exception is thrown because the server name and the port have not been specified.

C.The execution is successful provided the host name SAMPLEX has been previously defined in the local hosts table.

D.The execution is successful provided the database alias SAMPLEX has been previously defined in the local database catalog.

**Correct Answers: D** 

4: Which of the following is the DB2 Data Provider for the .NET class that requires a database connection to be open?

A.DB2DataSet

B.DB2RecordSet

C.DB2DataReader

D.DB2DataAdapter

**Correct Answers: C** 

5: Which of the following ADO .NET providers is supported by IBM DB2 Add-ins for Visual Studio?

A.OLE DB .NET Data Provider

B.DB2 Data Provider for .NET

C.ODBC Data Provider for .NET

D.DB2 for i5/OS .NET Provider

**Correct Answers: B** 

6: Two OLTP applications run concurrently but frequent locking occurs which requires a fix to be applied. Application A inserts rows into the table T1. Application B submits several queries against the table with a Cursor Stability isolation level. What would be the best course of action to improve the system's concurrency and performance?

A.Application B should be changed to access a view of table T1.

B.Application B should be changed to a Read Stability isolation level.

C.Application A should be changed to perform a commit after each INSERT operation.

D.Application A should be changed to include the NOT WITH HOLD clause on each INSERT operation.

**Correct Answers: C** 

7: Parameter markers are NOT permitted for which of the following statements?

A.CALL

**B.DELETE** 

C.EXECUTE IMMEDIATE

D.SET CURRENT SQLID

**Correct Answers: C** 

## 8: Given following table:

**EMP** 

EMPNO	NAME	DEPTNO	SALARY
=====	====	=====	=====
0010	JOSH	D95	30000
0020	JENNA	D98	25000
0030	DYLAN	D95	10000
0040	TRACY	D90	33000

and the following trigger definition:

CREATE TRIGGER track\_chgs

AFTER UPDATE OF salary, name, empno ON emp

REFERENCING NEW\_TABLE AS ntable

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FOR EACH STATEMENT MODE DB2SQL
BEGIN ATOMIC
    INSERT INTO changes
        SELECT empno, CURRENT TIMESTAMP FROM ntable;
END;
After executing the following SQL statements:
DELETE FROM changes;
UPDATE emp SET deptno = 'D98' WHERE deptno = 'D95';
INSERT INTO emp VALUES('0050', 'KEN', 'D90', 35000);
UPDATE emp SET salary = salary - 500 WHERE salary > 35000;
UPDATE emp SET salary = salary + 1000 WHERE salary <= 25000;
 What value will be returned by this query?
SELECT count(*) FROM changes
A.2
B.3
C.4
D.6
Correct Answers: A
9: Given the following table and view definitions:
CREATE TABLE city (
    cityid INT GENERATED ALWAYS AS IDENTITY,
    city name CHAR(10),
    state_code CHAR(2) CHECK(state_code IN ('CA','IL','NY','OH','TX')));
CREATE VIEW city_view AS (
    SELECT city_namell','llstate_code AS fullname FROM city
    WHERE state_code NOT IN ('OH','IL'));
and the following trigger definition:
CREATE TRIGGER city_viewInput
INSTEAD OF INSERT ON city view
REFERENCING NEW AS n
FOR EACH ROW MODE DB2SQL
BEGIN ATOMIC
    DECLARE delim INT;
    SET delim = LOCATE(',', n.fullname);
    INSERT INTO city(city_name,state_code)
        VALUES(SUBSTR(n.fullname, 1, delim - 1), SUBSTR(n.fullname, delim + 1, 2));
END:
If the following SQL statments are executed:
INSERT INTO city VALUES(DEFAULT, 'San Jose', 'CA');
INSERT INTO city_view VALUES('Chicago,IL');
INSERT INTO city VALUES(DEFAULT, 'Detroit', 'MI');
INSERT INTO city VALUES(DEFAULT, 'Austin', 'TX');
INSERT INTO city_view VALUES('Denver,CO');
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How many rows will be returned by the following query:
SELECT * FROM city
A.1
B.2
C.3
D.4
Correct Answers: C
10: An application running against a DB2 for AIX database needs to execute the following query:
SELECT t2.c2, t1.c3 FROM t1 INNER JOIN t2 ON t1.c1 = t2.c1
If table T1 resides in the DB2 for AIX database and table T2 resides in a DB2 for i5/OS database,
which of the following DB2 object types must the identifier T2 represent in order for this SQL
statement to run successfully?
A.ALIAS
B.NICKNAME
C.SERVER TABLE
D.TABLE WRAPPER
Correct Answers: B
11: After executing the following SQL statements:
CREATE TABLE tab1 (
    coll INT,
    col2 CHAR(1),
    PRIMARY KEY(col1));
CREATE TABLE tab2 (
    coll INT,
    col2 CHAR(1),
    FOREIGN KEY (col1) REFERENCES tab1(col1)
        ON DELETE CASCADE
        ON UPDATE NO ACTION );
INSERT INTO tab1 VALUES(1, 'A');
INSERT INTO tab1 VALUES(2, 'B');
INSERT INTO tab2 VALUES(3, 'A');
INSERT INTO tab2 VALUES(2, 'B');
UPDATE tab1 SET col1 = col1 + 1;
DELETE FROM tab1 WHERE col2 = 'B';
What values will be returned by the following SQL query?
SELECT col1, col2 FROM tab1 A.COL1
                                       COL2 ==== 2
                                                                       Έ'
A.COL1
          COL<sub>2</sub>
==== ====
2
            'B'
B.COL1 COL2
2
            'A'
```

C.COL1	COL2
====	====
1	'A'
2	'B'
D.COL1	COL2
====	====
2	'A'
3	'B'

Correct Answers: B

12: Which of the following SQL statements demonstrates the correct usage of a parameter marker?

A.SELECT ? FROM SYSCAT.TABLES

B.SELECT [] FROM SYSCAT.TABLES

C.SELECT CAST(? AS INTEGER) FROM SYSCAT.TABLES

D.SELECT CAST([] AS INTEGER) FROM SYSCAT.TABLES

**Correct Answers: C** 

13: An SQL procedure has been developed with several inline SQL PL statements encapsulated in a dynamic compound SQL statement. The procedure had been tested and performed well. After making a change to the last SQL statement the procedure not only failed to complete, but did not produce output from any statements which were not modified. What is the best explanation for this behavior?

A.The dynamic compound SQL is atomic.

B.The procedure doesn't have any savepoints.

C.The procedure has not been correctly re-cataloged.

D.The dynamic compound SQL individual statements are logically dependent on each other.

## **Correct Answers: A**

14: Which of the following is a characteristic of an application that uses a Distributed Unit of Work (DUOW)?

A.A single transaction can only read and/or modify data stored on one database server.

B.Multiple transactions can only read and/or modify data stored on one database server.

C.A single transaction can read and/or modify data stored across multiple database servers.

D.Multiple transactions can read and/or modify data stored on multiple database servers provided each transaction only accesses a single server.

## **Correct Answers: C**

15: Table EMPLOYEE contains the following rows:

EMPNO	FIRSTNME	LASTNAME WORKDEPT		
000010	CHRISTINE	HAAS	A00	
000020	MICHAEL	THOMPSON	B01	
000030	SALLY	KWAN	C01	

The isolation level for Application 1 is set to CS and autocommit is disabled. The isolation level

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for Application 2 is set to CS and the autocommit is enabled.
The following statements are executed in sequence:
Application 1:
DECLARE c1 CURSOR FOR SELECT * FROM employee ORDER BY empno
OPEN C1
FETCH C1
FETCH C1
Application 2:
UPDATE employee SET lastname = 'MILLFORD' WHERE empno = '000020'
Which of the following statements is correct?
A.The UPDATE succeeds because Application 2 runs with autocommit enabled so no row level
locks are necessary for the update.
B.The UPDATE succeeds because Application 1 holds a row level lock that is compatible with the
lock required by Application 2.
C.The UPDATE fails because Application 1 holds a row level read lock that is in conflict with the
lock required by Application 2.C.
D.The UPDATE fails because the row level locks held by Application 1 have been escalated to
table lock so updates by other connections are disallowed.
Correct Answers: B
16: Which of the following is a SQL stored procedure which will return a resultset containing ID,
NAME, DEPT and JOB values out of the STAFF table?
A.CREATE PROCEDURE result_set()
    LANGUAGE SQL
       SELECT id, name, dept, job
       FROM staff;
    END
B.CREATE PROCEDURE result_set
    LANGUAGE SQL
    RESULT SETS 1
    BEGIN
        SELECT id, name, dept, job
        FROM staff;
    END
C.CREATE PROCEDURE result set
    RESULT SETS 1
    BEGIN
       DECLARE c1 CURSOR FOR
            SELECT id, name, dept, job
            FROM staff;
       OPEN C1:
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END
D.CREATE PROCEDURE result_set()
    LANGUAGE SQL
    RESULT SETS 1
    BEGIN
        DECLARE c1 CURSOR WITH RETURN FOR
             SELECT id, name, dept, job
            FROM staff;
        OPEN c1:
    END
Correct Answers: D
17: After installing the DB2 Express-C 9 it was discovered that the Development Workbench was
not available. What was the reason for that?
A.It must be installed separately.
B.It is not supported with DB2 Express-C 9.
C.Since it is a licensed tool, it must be purchased from IBM.
D.Review the DB2 installation log for errors. Reinstall DB2 Express-C 9.
Correct Answers: A
18: What is the minimum privilege required to run a User Defined Function (UDF)?
A.CALL
B.EXECUTE
C.SYSCTRL
D.SYSMAINT
Correct Answers: B
19: A table named ACTIVITY.LOG was created by executing the following statement:
CREATE TABLE activity.log (event VARCHAR(128), date DATE)
Then, a stored procedure named ACTIVITY.LOGEVENT was created by executing the following
statement:
CREATE PROCEDURE activity.logEvent(IN stmtType CHAR(1))
LANGUAGE SQL
MainBody: BEGIN
   DECLARE sqlerrm VARCHAR(256) DEFAULT ";
   DECLARE ErrorIndicator CHAR(1) DEFAULT 'N';
   SOLStmt: BEGIN
       DECLARE CONTINUE HANDLER FOR SQLEXCEPTION
       BEGIN
          SET ErrorIndicator = 'Y';
       END;
       IF stmtType = 'I' THEN
          INSERT
                                                              Operation
                                                                          Performed.',
                     INTO
                               activity.log
                                            VALUES('Insert
CURRENT DATE);
```

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ELSEIF stmtType = 'U' THEN
           INSERT
                     INTO
                              activity.log
                                           VALUES('Update
                                                               Operation
                                                                           Performed.'.
CURRENT_DATE);
      ELSEIF stmtType = 'D' THEN I
          NSERT
                     INTO
                              activity.log
                                           VALUES('Delete
                                                              Operation
                                                                           Performed.',
CURRENT_DATE);
      ELSE
          SET ErrorIndicator = 'Y';
      END IF:
   END SQLStmt;
   IF ErrorIndicator = 'Y' THEN
      SIGNAL SQLSTATE '70000' SET message_text = 'Could not update activity log.';
```

END IF; END MainBody

User USER1 has the authority to access/manipulate data in the ACTIVITY.LOG table as well as to invoke the procedure ACTIVITY.LOGEVENT. If user USER1 executes the following commands:

CONNECT TO sample USER user1 USING ibmdb2;

DELETE FROM activity.log;

CALL activity.logEvent('i');

What will be the results?

A.The string "Insert Operation Performed." and the system date will be written to the ACTIVITY.LOG table.

B.The string "Update Operation Performed." and the system date will be written to the ACTIVITY.LOG table.

C.The string "Delete Operation Performed." and the system date will be written to the ACTIVITY.LOG table.

D.The error message 'SQL0438N Application raised error with diagnostic text: "Could not update activity log.". SQLSTATE=70000' will be generated.

**Correct Answers: D** 

20: Which of the following restrictions pertains to embedded SQL external routines?

A.Environment variables with names that start with 'DB2' are not allowed.

B.Executing statements or commands that are connection related is not allowed.

C.Environment variable values that were set before the DB2 database manager is started are not available.

D.When returning result sets from external nested stored procedures, a cursor cannot be opened with the same name on multiple nesting levels.

Correct Answers: B