

1) An application using the Repeatable Read isolation level acquires an update lock. When does the update lock get released?

- ☐ When the cursor accessing the row is closed
- ☐ **When the transaction issues a ROLLBACK statement**
- ☒ When the cursor accessing the row is moved to the next row
- ☐ the transaction changes are made via an UPDATE statement

2) Which two of the following SQL data types should be used to store double byte character data?

- ☐ CLOB
- ☐ CHAR
- ☒ **DBCLOB**
- ☐ **GRAPHIC**
- ☐ VARCHAR

3) A unit of work is using an isolation level of Uncommitted Read, and allows scanning through the table more than once within the unit of work. Which of the following can occur during processing of this unit of work?

- ☒ **It can access uncommitted changes made by other transactions.**
- ☐ It can update uncommitted changes made by other transactions.
- ☐ It can update rows and have those updated rows be changed by other transactions from one scan to the next.
- ☐ It can update rows and have those updated rows be committed by other transactions from one scan to the next.

4) Which of the following can duplicate the structure and related objects of a database table?

- ☐ Copy table
- ☐ Alter table
- ☐ Export table
- ☒ **Generate DDL**

5) Which of the following will give USER6 the ability to give SELECT privilege on table T.T1 to other users?

- ☐ GRANT SELECT ON TABLE t.t1 TO user6
- ☐ GRANT ALL PRIVILEGES ON TABLE t.t1 TO user6
- ☐ GRANT USE ON TABLE t.t1 TO user6 WITH GRANT OPTION
- ☒ **GRANT ALL PRIVILEGES ON TABLE t.t1 TO user6 WITH GRANT OPTION**

6) Which of the following can be used to store images in a DB2 database?

- ☒ **DB2 AVI Extender**
- ☐ DB2 XML Extender
- ☐ DB2 Test Extender
- ☐ DB2 Spatial Extender

7) Given the table:

STAFF	
ID	LASTNAME
1	Jones
2	Smith
3	<null>

Which of the following statements removes all rows from the table where there is a NULL value for LASTNAME?

- ☒ **DELETE FROM staff WHERE lastname IS NULL**
- ☐ DELETE FROM staff WHERE lastname = 'NULL'
- ☐ DELETE ALL FROM staff WHERE lastname IS NULL
- ☐ DELETE ALL FROM staff WHERE lastname = 'NULL'

8) A stored procedure has been created with the following statement:

```
CREATE PROCEDURE P1(IN VAR1 INTEGER, OUT VAR2 VARCHAR(10))...
```

From the command line processor (CLP), which is the correct way to invoke this procedure?

- ☐ RUN P1 (10, ?)
- ☒ **CALL P1 (10, ?)**

- ☐ SELECT P1 (10, ?)
- ☐ EXECUTE P1 (10, ?)

9) SQL source statements for which two of the following are stored in the system catalog?

- ☒ **Views**
- ☒ Tables
- ☐ Indexes
- ☐ **Triggers**
- ☐ Constraints

10) Which of the following isolation levels will hold locks only on the rows in the answer set at the end of the query?

- ☐ **Read Stability**
- ☐ Repeatable Read
- ☐ Cursor Stability
- ☒ Uncommitted Read

11) Given the following statements:

```
CREATE TABLE tab1 (c1 CHAR(1))
INSERT INTO tab1 VALUES ('b')
CREATE VIEW v1 AS SELECT c1 FROM tab1 WHERE c1='a' WITH CHECK OPTION
INSERT INTO v1 VALUES ('a')
INSERT INTO v1 VALUES ('b')
```

How many rows would be returned from the statement, SELECT c1 FROM tab1? 2

- ☐ 0
- ☒ 1
- ☐ **2**
- ☐ 3

12) Given the following statements:

```
CREATE TABLE t1 (id INTEGER, CONSTRAINT chkid CHECK (id<100))
```

```
INSERT INTO t1 VALUES(100)
```

```
COMMIT
```

Which of the following occurs as a result of issuing the statements?

- ☐ The row is inserted with ID having a NULL value.
- ☐ The row is inserted with ID having a value of 100.
- ☒ **The row insertion with a value of 100 for ID is rejected.**
- ☐ The trigger called chkid is activated to validate the data.

13) When constraint checking is suspended or disabled, a table or table space (depending on platform) is placed in which of the following states?

- ☐ Paused
- ☒ **Check pending**
- ☐ Intent locked
- ☐ Constraint waiting

14)

Given the tables:

COUNTRY			
ID	NAME	PERSON	CITIES
1	Argentina	1	10
2	Canada	2	20
3	Cuba	2	10
4	Germany	1	0
5	France	7	5

STAFF	
ID	LASTNAME
1	Jones
2	Smith

How many rows would be inserted into the STAFF table using the following statement?

```
INSERT INTO staff
  SELECT person, 'Greyson'
  FROM country WHERE person > 1
```

- ☐ 0
- ☐ 1
- ☐ 2
- ☒ 3
- ☐ 5

15) Which of the following statements eliminates all but one of each set of repeated rows in the final result table?

- ☐ SELECT UNIQUE \* FROM t1
- ☒ **SELECT DISTINCT \* FROM t1**
- ☐ SELECT \* FROM DISTINCT T1
- ☐ SELECT UNIQUE (\*) FROM t1
- ☐ SELECT DISTINCT (\*) FROM t1

16)

A stored procedure has been built and deployed on the DB2 UDB server machine. What is the minimum software that must be installed to allow an application on the client to execute the stored procedure?

- ☒ **DB2 Runtime Client**
- ☐ DB2 Personal Edition
- ☐ DB2 Administration Client
- ☒ DB2 Application Development Client

17) Given the following table definitions:

```
DEPARTMENT
    deptno          CHAR(3)
    deptname        CHAR(30)
    mgrno           INTEGER
    admrdept        CHAR(3)

EMPLOYEE
    empno           INTEGER
    firstname       CHAR(30)
    midinit         CHAR
    lastname        CHAR(30)
```

workdept                      CHAR(3)

Which of the following statements will produce a result set satisfying these criteria?

- The empno and lastname of every employee
- For each employee, include the empno and lastname of their manager
- Includes employees both with and without a manager

Tutorial

- ☐ SELECT e.empno, e.lastname  
FROM employee e LEFT OUTER JOIN  
    (department INNER JOIN employee m ON mgrno = m.empno)  
    ON e.workdept = deptno
- ☐ SELECT e.empno, e.lastname, m.empno, m.lastname  
FROM employee e LEFT INNER JOIN  
    (department INNER JOIN employee m ON mgrno = m.empno)  
    ON e.workdept = deptno
- ☒ SELECT e.empno, e.lastname, m.empno, m.lastname  
FROM employee e LEFT OUTER JOIN  
    (department INNER JOIN employee m ON mgrno = m.empno)  
    ON e.workdept = deptno
- ☐ SELECT e.empno, e.lastname, m.empno, m.lastname  
FROM employee e RIGHT OUTER JOIN  
    (department INNER JOIN employee m ON mgrno = m.empno)  
    ON e.workdept = deptno

18) Given a read-only application that requires consistent data for every query, which of the following isolation levels should it use to provide the most concurrency with other applications doing updates?

- ☐ Read Stability
- ☐ Repeatable Read
- ☒ **Cursor Stability**
- ☐ Uncommitted Read

19) Given the table COUNTRY and the statements below:

COUNTRY	ID	NAME	PERSON_ID	CITIES
	1	Argentina	1	10
	2	Canada	2	20
	3	Cuba	2	10
	4	Germany	1	0
	5	France	7	5

```
DECLARE c1 CURSOR WITH HOLD FOR SELECT * FROM country ORDER BY  
person_id, name
```

```
OPEN c1
FETCH c1
FETCH c1
COMMIT
FETCH c1
```

Which of the following is the last name obtained from the table?

- ☐ Cuba
- ☐ France
- ☒ **Canada**
- ☐ Germany
- ☐ Argentina

20) Which of the following statements will create an index and prevent table T1 from containing two or more rows with the same values for column C1?

- ☒ **CREATE UNIQUE INDEX ix1 ON t1 (c1)**
- ☐ CREATE DISTINCT INDEX ix1 ON t1 (c1)
- ☐ CREATE UNIQUE INDEX ix1 ON t1 (c1,c2)
- ☐ CREATE DISTINCT INDEX ix1 ON t1 (c1,c2)

21) A business has a requirement that a row not be deleted from the parent table if a row with the corresponding key value still exists in the child table. Which of the following delete rules would enforce this requirement?

- ☐ DELETE
- ☐ CASCADE
- ☒ **RESTRICT**
- ☐ SET NULL

22) 

```
CREATE TABLE tab1 (a INT, b INT, c INT, CHECK (a > 200))
CREATE VIEW v1 AS SELECT a, b, c FROM tab1 WHERE a > 250
```

Which of the following statements will fail?

- ☐ INSERT INTO v1 VALUES (250, 2, 3)
- ☐ INSERT INTO v1 VALUES (300, 2, 3)
- ☒ **INSERT INTO tab1 VALUES (200, 2, 3)**
- ☐ INSERT INTO tab1 VALUES (250, 2, 3)

23) ORG

deptnumb	INTEGER
deptname	CHAR(30)
manager	INTEGER
division	CHAR(30)
location	CHAR(30)

STAFF

id	INTEGER
name	CHAR(30)
dept	INTEGER
job	CHAR(20)
years	INTEGER
salary	DECIMAL(10,2)
comm	DECIMAL(10,2)

Which of the following statements will display all departments, alphabetically by department name, and the name of the manager of each department?

- ☐ SELECT a.deptname, b.name FROM org a, staff b WHERE b.manager=a.id
- ☐ SELECT a.deptname, b.name FROM org a, staff b WHERE b.manager=a.id GROUP BY a.deptname, b.name
- ☒ **SELECT a.deptname, b.name FROM org a, staff b WHERE a.manager=b.id ORDER BY a.deptname, b.name**
- ☐ SELECT a.deptname, b.name FROM org a, staff b WHERE a.manager=b.id GROUP BY b.name ORDER BY a.deptname

24) Given the following statements:

```
CREATE TABLE tab1 (c1 CHAR(3) WITH DEFAULT '123',c2 INTEGER);
INSERT INTO tab1(c2) VALUES (123);
```

Which will be the result of the following statement when issued from the Command Line Processor?

```
SELECT * FROM tab1;
```

- ☐ C1 C2  
-----  
0 record(s) selected.
- ☒ **C1 C2  
-----  
123 123  
  
1 record(s) selected.**
- ☐ C1 C2  
-----  
123



☒ 1 record(s) selected.  
 C1 C2  
 -----  
 - 123  
 1 record(s) selected

25)

Which of the following processes is NOT performed by DB2 Warehouse Manager?

- ☒ **Query**
- ☐ Loading
- ☐ Extraction
- ☐ Transformation

26) For which of the following database objects can locks NOT be obtained?

- ☐ A row
- ☐ A table
- ☒ **A column**
- ☐ An index key

27) A declared temporary table is used for which of the following purposes?

- ☒ **To store intermediate results**
- ☐ To share result sets between applications
- ☐ To provide an area for database manager sorts
- ☐ To create a backup copy of a database or table space

28) Given the following table definition and SQL statements:

```
CREATE TABLE table1 (col1 INT, col2 CHAR(40), col3 INT)
GRANT INSERT, UPDATE, SELECT, REFERENCES ON TABLE table1 TO USER
usera
```

Which of the following SQL statements will revoke the privileges granted to user USERA on COL1 and COL2?

- ☐ REVOKE UPDATE ON TABLE table1 FROM USER usera

- ☒ **REVOKE ALL PRIVILEGES ON TABLE table1 FROM USER usera**
- ☐ REVOKE ALL PRIVILEGES ON TABLE table1 COLUMNS (col1, col2) FROM usera
- ☐ REVOKE REFERENCES ON TABLE table1 COLUMNS (col1, col2) FROM USER usera

29) A user creates the table TABLE1 with a referential constraint defined over column COL1. Which of the following statements would explicitly give USER1 the ability to read rows from the table?

- ☒ **GRANT SELECT ON TABLE table1 TO user1**
- ☐ GRANT ACCESS ON TABLE table1 TO user1
- ☐ GRANT REFERENCES TO user1 ON TABLE table1
- ☐ GRANT UPDATE (col1) TO user1 ON TABLE table1

30)

A developer is building an embedded SQL application on AIX that will access DB2 UDB for OS/390 or OS/400 servers. Which of the following products is required to be installed on the AIX system in order to build the application?

- ☐ DB2 Connect Personal Edition
- ☐ DB2 Personal Developer's Edition
- ☐ DB2 UDB Workgroup Server Edition
- ☒ **DB2 Universal Developer's Edition**

31) USER2 has SELECT WITH GRANT OPTION on APPL.TAB1.

Which of the following statements is USER2 authorized to execute?

- ☐ GRANT INSERT ON TABLE appl.tab1 TO user8
- ☒ **GRANT SELECT ON TABLE appl.tab1 TO user8**
- ☐ GRANT REFERENCES ON TABLE appl.tab1 user8
- ☐ GRANT ALL PRIVILEGES on TABLE appl.tab1 TO user8

32) Cataloging a remote database server from a Linux, UNIX, or Windows gateway is:

- ☐ performed to identify the location of the clients.
- ☒ **performed to identify the server the DB2 database manager is on.**
- ☐ never performed in DB2, as only one database per node is allowed, so cataloging a node automatically catalogs the database at that node.

- ☐ performed on a Linux, UNIX, or Windows machine to open the catalogs in the DB2 database server and present a user with a list of all accessible tables in that database.

33) Which of the following has an object tree from which you can perform administrative tasks against database objects?

- ☒ **Control Center**
- ☐ Command Center
- ☐ Command Line Processor
- ☐ DB2 Administration Client

34) Which of the following is a valid wildcard character in a LIKE clause of a SELECT statement?

- ☐ \*
- ☒ **\_**
- ☐ @
- ☐ ?

35) Given the following statements:

```
CREATE TABLE t4
  (c1 INTEGER NOT NULL,
   c2 INTEGER,
   c3 DECIMAL(7,2) NOT NULL,
   c4 CHAR(20) NOT NULL);
CREATE UNIQUE INDEX i4 ON t4(c1,c3);
ALTER TABLE t4 ADD PRIMARY KEY (c1,c3);
```

Which of the following statements is TRUE?

- ☐ The ALTER TABLE statement will fail.
- ☒ **The primary key will use the I4 unique index.**
- ☐ A primary index will need to be created on the composite key (C1,C3).
- ☐ An additional unique index will automatically be created on the composite key (C1,C3).

36) Given that table T1 needs to hold specific numeric values up to 99999.99 in column C1.

Which of the following would be the most exact definition for C1?

- ☐ REAL
- ☐ INTEGER
- ☒ **NUMERIC(7,2)**
- ☐ DECIMAL(5,2)

37) What is the difference between a unique index and a primary key?

- ☐ They are different terms for the same concept.
- ☐ Unique indexes can be defined over multiple columns. Primary keys must have only one column.
- ☐ Unique indexes can be defined in ascending or descending order. Primary keys must be ascending.
- ☒ **Unique indexes can be defined over a column or columns that allow nulls. Primary keys cannot contain nulls.**

38) A client application on OS/390 or OS/400 must access a DB2 server on Linux. At a minimum, which of the following products is required to be on the DB2 server?

- ☐ DB2 Connect Enterprise Edition
- ☒ **DB2 UDB Enterprise Server Edition**
- ☐ DB2 Connect Enterprise Edition and DB2 UDB Workgroup Server Edition
- ☐ DB2 Connect Enterprise Edition and DB2 UDB Enterprise Server Edition

39) Which of the following tools can be used to catalog a database?

- ☐ Journal
- ☐ Task Center
- ☐ License Center
- ☒ **Configuration Assistant**

40) The table STOCK has the following column definitions:

type	CHAR(1)
status	CHAR(1)

quantity	INTEGER
price	DEC (7,2)

items are indicated to be out of stock by setting STATUS to NULL and QUANTITY and PRICE to zero.

Which of the following statements updates the STOCK table to indicate that all the items except for those with TYPE of "S" are temporarily out of stock?

- ☐ UPDATE stock SET status='NULL', quantity=0, price=0 WHERE type <> 'S'
- ☒ **UPDATE stock SET (status, quantity, price) = (NULL, 0, 0) WHERE type <> 'S'**
- ☐ UPDATE stock SET (status, quantity, price) = ('NULL', 0, 0) WHERE type <> 'S'
- ☐ UPDATE stock SET status = NULL, SET quantity=0, SET price = 0 WHERE type <> 'S'

41) Which of the following DDL statements creates a table where employee IDs are unique?

- ☐ CREATE TABLE t1 (employid INTEGER)
- ☐ CREATE TABLE t1 (employid INTEGER GENERATED BY DEFAULT AS IDENTITY)
- ☐ CREATE TABLE t1 (employid INTEGER NOT NULL)
- ☒ **CREATE TABLE t1 (employid INTEGER NOT NULL PRIMARY KEY)**

42) Given a large table with the following sample data:

STAFF	
ID	LASTNAME
1	Jones
2	Smith
...	...

When issuing the query "SELECT \* FROM staff", which of the following will always describe the order of the rows in the result set?

- ☒ **An undetermined order**
- ☐ Sorted by primary key
- ☐ The order in which rows were inserted into the table
- ☐ Sorted by the ID column, then by the LASTNAME column

43) Given the following transaction in an embedded SQL application:

```
CREATE TABLE dwaine.mytab (col1 INT, col2 INT)
INSERT INTO dwaine.mytab VALUES (1,2)
INSERT INTO dwaine.mytab VALUES (4,3)
ROLLBACK
```

What is the result of issuing the following statement?

```
SELECT * FROM dwaine.mytab
```

☒ **SQLCODE -204 indicating that "DWAINES.MYTAB" is an undefined name.**

- ☐ COL1 COL2  
-----  
0 record(s) selected.
- ☐ COL1 COL2  
-----  
1 2 1 record(s) selected.
- ☐ COL1 COL2  
-----  
1 2  
4 32 record(s) selected.

44) Given the following SQL statement:

```
GRANT EXECUTE ON PACKAGE proc1 TO usera WITH GRANT OPTION
```

Which two of the following describe what USERA is allowed to do?

- ☒ **Execute SQL statements in package PROC1**
- ☐ Grant any privilege on package PROC1 to other users
- ☐ Grant bind privilege on package PROC1 to other users
- ☒ **Grant execute privilege on package PROC1 to other users**
- ☐ Access all of the tables referenced in package PROC1 from any program

45) Given the tables:

COUNTRY			
ID	NAME	PERSON_ID	CITIES
1	Argentina	1	10

2	Canada	2	20
3	Cuba	2	10
4	Germany	1	0
5	France	7	5

```
STAFF
ID      LASTNAME
1       Jones
2       Smith
```

COUNTRY(PERSON\_ID) is the foreign key for STAFF(ID).

Which of the following statements removes from the COUNTRY table those rows that do not have a STAFF person assigned?

- ☐ DELETE FROM country WHERE id IN (SELECT id FROM staff)
- ☐ DELETE FROM country WHERE id NOT IN (SELECT person\_id FROM staff)
- ☒ **DELETE FROM country WHERE person\_id NOT IN (SELECT id FROM staff)**
- ☐ DELETE FROM country WHERE person\_id IN (SELECT person\_id FROM staff)

46) When using DB2 Connect, which of the following commands specifies the protocol information on how to connect to the host or to the server?

- ☐ CATALOG DCS
- ☒ **CATALOG NODE**
- ☐ CATALOG DATABASE
- ☐ CATALOG ODBC DATA SOURCE