

Chapter 16

SQL*PLUS, SQL, PL/SQL, Forms and Reports

Questions 1 to 23 are from SQL*Plus.

1. Which of the following activities are you allowed to do after executing the DISCONNECT command?
 - (a) Reconnect
 - (b) Exit the SQL*Plus session
 - (c) Execute certain SQL*Plus commands
 - (d) None of these
2. What does the / command do?
 - (a) Does nothing
 - (b) Prints the character /
 - (c) Re-executes the non SQL*Plus command that was most recently executed.
 - (d) Re-executes the most recently executed command
3. What command should you try if DBMS_OUTPUT.PUT_LINE is not doing what it is supposed to do?
 - (a) SET ECHO ON
 - (b) SET TERMOUT ON
 - (c) SET DISPLAY ON
 - (d) SET SERVEROUTPUT ON
4. SQL*Plus will know you are typing a PL/SQL block when it encounters the keyword
 - (a) PL/SQL
 - (b) BEGIN
 - (c) EXCEPTION
 - (d) DECLARE
5. Which of the following is buffered by SQL*Plus?
 - (a) SQL statements
 - (b) SQL*Plus commands
 - (c) PL/SQL block
 - (d) None of these

6. A script file that is executed by SQL*Plus cannot contain
 - (a) SQL*Plus commands
 - (b) SQL statements
 - (c) PL/SQL block
 - (d) none of these
7. Script files can be executed by the
 - (a) START command
 - (b) STA command
 - (c) @ command
 - (d) EXECUTE command
8. To change the format of the date returned by SYSDATE, use the command
 - (a) ALTER SESSION RESET DATE
 - (b) ALTER SESSION CHANGE DATE
 - (c) ALTER SESSION SET SYSDATE
 - (d) ALTER SESSION SET NLS_DATE_FORMAT
9. Which of the following methods cannot be used to specify a comment in SQL*Plus scripts?
 - (a) --
 - (b) REMARK
 - (c) /*...*/
 - (d) None of these
10. The DUAL table has
 - (a) One row with many columns
 - (b) One column with many rows
 - (c) One row and one column
 - (d) Many rows and many columns
11. The DESCRIBE command if used on a table, will not display information about
 - (a) Primary key
 - (b) Default Values
 - (c) Indexes
 - (d) Triggers
12. The ALL Data Dictionary view lets you access any object
 - (a) owned by you
 - (b) for which you have access rights
 - (c) in the database
 - (d) none of these
13. A PL/SQL block can return data to SQL*Plus through
 - (a) bind variables
 - (b) substitution variables
 - (c) local variables
 - (d) none of these
14. Which of the following is not a type of data dictionary view?
 - (a) USER
 - (b) ALL
 - (c) DBA
 - (d) SYS
15. Which of the following information will be displayed when you use the DESCRIBE command on functions?
 - (a) Data type of the return value
 - (b) Data type of the parameters
 - (c) Mode of the parameters
 - (d) Default value of the parameters
16. The owner of the DUAL table is
 - (a) SYS
 - (b) SUPERUSER
 - (c) SCOTT
 - (d) MANAGER
17. Which of the following data dictionary view is used by the DESCRIBE command to extract information about the columns?
 - (a) ALL_TABLES
 - (b) ALL_COLUMNS
 - (c) ALL_COLS
 - (d) ALL_TAB_COLUMNS
18. SGA stands for
 - (a) Show Global Area
 - (b) Start Global Area
 - (c) System Global Area
 - (d) Shut Global Area

19. You are executing a SELECT statement. In the display, each row that is displayed spans more than a line and you see a line after a set of 5 records. You can fix this problem by using the
- (a) SET LINESIZE command
 - (b) SET PAGESIZE command
 - (c) SET LINESIZE and SET PAGESIZE commands
 - (d) SET SCREENWIDTH command
20. Which command is used to get input from the user?
- (a) GET
 - (b) ACCEPT
 - (c) READ
 - (d) CIN
21. Which of the following remarks about SQL*Plus are correct?
- (a) It is a PL/SQL development tool
 - (b) It works in character mode
 - (c) It is an integral part of the standard Oracle installation
 - (d) It does not have a PL/SQL engine
22. To interactively assign a value to a variable, precede the variable name with
- (a) :
 - (b) --
 - (c) getVal
 - (d) &
23. Which of the following SQL*Plus commands can be used to see the compilation errors in a PL/SQL code?
- (a) TRACE
 - (b) SHOW ERRORS
 - (c) PROFILE
 - (d) DEBUG

Questions 24 to 109 are from SQL.

24. NOT BETWEEN 10 AND 20
- (a) displays NULL values
 - (b) does not display NULL values
 - (c) may display NULL values
 - (d) none of these
- *25. The SQL statement
SELECT SUBSTR('123456789', INSTR('abcabcabc', 'b'), 4) FROM DUAL ;
prints
- (a) 6789
 - (b) 2345
 - (c) 1234
 - (d) 456789
- *26. The SELECT statement
SELECT 'Hi' FROM DUAL WHERE 1 = NULL;
outputs
- (a) Hi
 - (b) FALSE
 - (c) TRUE
 - (d) nothing
27. Which of the following group functions ignore NULL values?
- (a) MAX
 - (b) COUNT
 - (c) SUM
 - (d) COUNT(*)
- *28. Table Employee has 10 records. It has a non-NULL SALARY column which is also UNIQUE. The SQL statement
SELECT COUNT(*) FROM EMPLOYEE WHERE SALARY > ANY (SELECT SALARY
FROM EMPLOYEE);
prints
- (a) 10
 - (b) 9
 - (c) 5
 - (d) 0

- *29. The SQL statement
SELECT SUBSTR('abcdefghij', INSTR('123321234', '2', 3, 2), 2) FROM DUAL;
prints
(a) gh (b) 23 (c) bc (d) ab
- *30. From the following combinations of wildcard characters, choose those that are equivalent.
(a) % (b) _% (c) %_ (d) _ _
- *31. The SQL statement
SELECT ROUND(45.926, -1) FROM DUAL ;
(a) is illegal (b) prints garbage (c) prints 045.926 (d) prints 50
32. Which of the following must be enclosed in double quotes?
(a) Dates (b) Column Alias (c) Strings (d) All of these
- *33. If the SQL statement
SELECT NEXT_DAY('01-SEP-95', 'FRIDAY') FROM DUAL ;
prints
08-SEP-95
what will the SQL statement
SELECT NEXT_DAY('01-SEP-95', 'SATURDAY') FROM DUAL ;
print?
(a) 09-SEP-95 (b) 02-SEP-95 (c) 05-SEP-95 (d) 06-SEP-95
- *34. The SELECT statement
SELECT 'Hi' FROM DUAL WHERE 1 != NULL;
outputs
(a) TRUE (b) Hi (c) FALSE (d) nothing
- *35. In SQL, 10/NULL will evaluate to
(a) FALSE (b) -1 (c) NULL (d) 10
36. Almost all the DATE functions return a value of data type DATE, except
(a) MONTHS_BETWEEN (b) ROUND
(c) NEXT_DAY (d) TRUNC
37. The SELECT statement
SELECT LOWER('AbCd'), UPPER('AbCd'), INITCAP('AbCd eFgh') FROM DUAL;
will print
(a) abcd ABCD Abcd Efgh (b) abcd ABCD ABCD EFGH
(c) abcd ABCD abcd efgh (d) abcd ABCD aBCD eFGH
- *38. The SQL statement
SELECT TRUNC(45.926, -1) FROM DUAL ;
(a) is illegal (b) 5 (c) prints 45.9 (d) prints 40
39. The SQL statement
SELECT SUBSTR('123456789', INSTR('abcabcabc', 'b', 4)) FROM DUAL ;
prints
(a) 2345 (b) 6789 (c) 56789 (d) 89

40. The SQL statement

```
SELECT SYSDATE FROM DUAL ;
```

prints

06-FEB-05

Consider the three SQL statements

```
SELECT TO_DATE( (LTRIM (RTRIM('NOV 23, 2005'))), 'Mon DD, YY') FROM DUAL;
```

— Statement 1

```
SELECT TO_DATE( (RTRIM (LTRIM(' NOV 23, 2005 '))), 'Mon DD, YY') FROM DUAL; — Statement 2
```

```
SELECT TO_DATE( 'NOV 23, 2005', 'Mon DD, YY') FROM DUAL; — Statement 3
```

Which of these statements gives the same output?

- (a) Only Statement 1 and Statement 2 (b) Only Statement 1 and Statement 3
(c) Only Statement 2 and Statement 3 (d) All the three statements give the same output

The next 20 questions (41-60) are based on the following three tables.

Table Name: CustInfo

CUSTNUM	CITY	ORDERNUM
1001	Kanpur	2001
1002	Vizag	2002
1003	Guntur	2003
1004	Agra	2004
1005	Guntur	2005
1006	Pune	2006
1007	Guntur	2007
1008	Pune	2008
1009	Delhi	2009
1010	Imphal	2010

Table Name: OrderInfo

ORDERNUM	ORDERDATE	ORDEREDITEM	QUANTITY
2001	02-FEB-05	Pen	5
2001	02-FEB-05	Pencil	3
2002	13-JAN-05	Pen	3
2002	13-JAN-05	Pencil	8
2003	11-JAN-05	Table	1
2004	11-JUN-04	Chair	4
2005	11-JAN-04	Table	1
2006	17-APR-01	Pen	10
2007	21-JUL-04	Pencil	20
2008	15-JAN-05	Table	2
2009	10-OCT-02	Table	1
2009	10-OCT-02	Pen	1
2009	10-OCT-02	Pencil	1
2010	18-OCT-03	Table	1

48. Fill the blanks in the following query that finds the number of customers who ordered for either pen or pencil.

```
SELECT COUNT(_____ A.CustNum)
FROM    CustInfo A, OrderInfo B
WHERE   A.OrderNum = B.OrderNum
        _____ B.OrderedItem _____ ('Pen', 'Pencil');
```

- (a) ALL, AND, NOT IN (b) ALL, OR, IN
(c) DISTINCT, AND, IN (d) DISTINCT, OR, IN

- *49. Which of the following CustNum will not be displayed by the following SQL query?

```
SELECT A.CustNum
FROM CustInfo A, OrderInfo B
WHERE A.OrderNum = B.OrderNum
      AND B.OrderedItem = 'Pen'
UNION
SELECT A.CustNum
FROM CustInfo A, OrderInfo B
WHERE A.OrderNum = B.OrderNum
      AND B.OrderedItem = 'Pencil';
```

- (a) 1006 (b) 1007 (c) 1008 (d) 1009

- *50.** How many rows will be displayed by the following SQL query?

```
SELECT A.CustNum
FROM CustInfo A, OrderInfo B
WHERE A.OrderNum = B.OrderNum
      AND B.OrderedItem = 'Pen'
UNION ALL
SELECT A.CustNum
FROM CustInfo A, OrderInfo B
WHERE A.OrderNum = B.OrderNum
      AND B.OrderedItem = 'Pencil';
```

- (a) 7 (b) 8 (c) 9 (d) 10

- *51.** Which CustNum will not be displayed by the following SQL query?

```
SELECT A.CustNum
FROM CustInfo A, OrderInfo B
WHERE A.OrderNum = B.OrderNum
      AND B.OrderedItem = 'Pen'
INTERSECT
SELECT A.CustNum
FROM CustInfo A, OrderInfo B
WHERE A.OrderNum = B.OrderNum
      AND B.OrderedItem = 'Pencil';
```

- (a) 1001 (b) 1002 (c) 1006 (d) 1009

56. Which of the following remarks about the following query are true?

```
SELECT  DISTINCT(A.CustNum)
FROM    CustInfo A, OrderInfo B
WHERE   A.OrderNum = B.OrderNum
        AND B.OrderedItem = (SELECT  C.ItemName
                              FROM    ItemInfo C
                              WHERE   C.UnitPrice = (SELECT Max(C.UnitPrice)
                                                         FROM ItemInfo C));
```

- (a) This query is syntactically wrong
- (b) It returns 5 rows
- (c) One of the CustNum returned is 1008
- (d) It returns all CusNum that ordered a table

- *57. Which of the listed options can fill the blank if the following query displayed exactly 6 rows?

```
SELECT  DISTINCT(A.CustNum)
FROM    CustInfo A, OrderInfo B
WHERE   A.OrderNum = B.OrderNum
        AND B.OrderedItem IN (SELECT  C.ItemName
                              FROM    ItemInfo C
                              WHERE   C.UnitPrice > ____ );
```

- (a) 2
- (b) 8
- (c) 20
- (d) 30

- *58. What is the CustNum that will be displayed by the following query?

```
SELECT  DISTINCT(A.CustNum)
FROM    CustInfo A, OrderInfo B
WHERE   A.OrderNum = B.OrderNum
        AND B.OrderDate = (SELECT  MAX(C.OrderDate)
                              FROM    OrderInfo C);
```

- (a) 1001
- (b) 1002
- (c) 1003
- (d) 1004

- *59. How many rows are returned by the following query?

```
SELECT  DISTINCT(A.CustNum)
FROM    CustInfo A, OrderInfo B
WHERE   A.OrderNum = B.OrderNum
        AND B.OrderDate BETWEEN '11-JUN-04' AND '02-FEB-05' ;
```

- (a) 4
- (b) 5
- (c) 6
- (d) 7

- *60. The query

```
SELECT SYSDATE FROM DUAL;
displays
02-FEB-05
```

How many rows will be displayed by the following query?

```
SELECT DISTINCT(A.CustNum)
FROM   CustInfo A, OrderInfo B
WHERE  A.OrderNum = B.OrderNum
      AND SUBSTR(TO_CHAR(B.OrderDate), 8) = (SELECT SUBSTR(TO_CHAR(SYSDATE), 8) FROM DUAL);
```

- (a) 1 (b) 2 (c) 3 (d) 4

61. Which of the following combinations of wildcard characters has the same meaning as the wildcard character %?

- (a) %% (b) _% (c) %_ (d) _ _

*62. The SELECT statement

```
SELECT 'Hi' FROM DUAL WHERE NULL = NULL;
outputs
```

- (a) Hi (b) FALSE (c) TRUE (d) nothing

*63. Which of the following is illegal?

- (a) SELECT SYSDATE - SYSDATE FROM DUAL ;
(b) SELECT SYSDATE - (SYSDATE - 2) FROM DUAL ;
(c) SELECT SYSDATE - (SYSDATE + 2) FROM DUAL ;
(d) None of these

64. When a SELECT statement displays data

- (a) dates and strings will be justified to the left by default
(b) numbers will be justified to the right by default
(c) dates and strings will be justified to the right by default
(d) numbers will be justified to the left by default

65. If a query involves NOT, AND, OR with no parenthesis

- (a) NOT will be evaluated first; AND will be evaluated second; OR will be evaluated last.
(b) NOT will be evaluated first; OR will be evaluated second; AND will be evaluated last.
(c) AND will be evaluated first; OR will be evaluated second; NOT will be evaluated last.
(d) the order of occurrence determines the order of evaluation.

66. Choose the correct statements.

- (a) ORDER BY NAME ASC, displays NULLs last
(b) ORDER BY NAME DESC, displays NULLs first
(c) ORDER BY NAME ASC, displays NULLs first
(d) ORDER BY NAME DESC, displays NULLs last

*67. The SQL statement

```
SELECT LENGTH('') FROM DUAL ; -- '' is two single quotes
prints,
```

- (a) 0 (b) a garbage value (c) NULL (d) 1

68. The SQL statement
SELECT INSTR('abcdecfg', 'c') FROM DUAL ;
prints,
(a) 2 (b) 3 (c) 5 (d) 6
69. The SQL statement
SELECT LPAD('abcd',10,'*') FROM DUAL ;
prints,
(a) abcd***** (b) *****abcd (c) ***abcd*** (d) *****
70. Table EMPLOYEE has 5 rows. Consider the following sequence of SQL statements.
SQL> CREATE TABLE myTable AS (SELECT * FROM EMPLOYEE);
SQL> INSERT INTO myTable SELECT * FROM myTable;
SQL> INSERT INTO myTable SELECT * FROM myTable;
SQL> INSERT INTO myTable SELECT * FROM myTable;
SQL> INSERT INTO myTable SELECT * FROM myTable;
If the SQL statement
SELECT COUNT(*) FROM MYEMP;
is executed after executing all the statements listed above, what will be printed is
(a) 80 (b) 25 (c) 20 (d) 5
- *71. Let the statement
SELECT column1 FROM myTable;
return 10 rows. The statement
SELECT ALL column1 FROM myTable;
will return
(a) less than 10 rows (b) more than 10 rows
(c) exactly 10 rows (d) none of these
- *72. The SQL statement
SELECT (NVL(NVL(NULL, 3), 4)) FROM DUAL;
(a) prints 3 (b) prints 4 (c) prints NULL (d) is illegal
- *73. Table Employee has 10 records. It has a non-NULL SALARY column which is also UNIQUE.
The SQL statement
SELECT COUNT(*) FROM EMPLOYEE WHERE SALARY > ALL (SELECT SALARY
FROM EMPLOYEE);
prints
(a) 10 (b) 9 (c) 5 (d) 0
- *74. The SELECT statement
SELECT 'Hi' FROM DUAL WHERE 1 != NULL;
outputs
(a) Hi (b) FALSE (c) TRUE (d) nothing
75. Which of the following SQL commands can be used to add data to a database table?
(a) ADD (b) UPDATE (c) APPEND (d) INSERT

76. The SQL statement

SELECT DECODE(2, 2, DECODE(3, 3, 2)) FROM DUAL;

- (a) is illegal (b) prints garbage (c) 3 (d) 2

*77. Which of the following joins is also called as an 'inner join'?

- (a) Non-Equijoin (b) Self-Join (c) Equijoin (d) None of these

The next 13 questions (78–90) are based on the following table.

Consider the following table. (Table Name: train_info)

TrainNum	From	To	Through1	Through2	Through3
1	Chennai	New Delhi	Vijayawada	Jhansi	Agra
2	Vijayawada	New Delhi	Jhansi	Agra	
3	Hyderabad	Kanpur	Vijayawada	Jhansi	
4	Hyderabad	Kanpur	New Delhi	Agra	
5	Vijayawada	Agra	Hyderabad	Jhansi	Kanpur
6	Chennai	Vijayawada			

78. The SQL statement

SQL> SELECT COUNT(*) FROM train_info

WHERE through1 LIKE '%ad%';

will print,

- (a) 1 (b) 2 (c) 3 (d) 4

*79. How many record(s) will be printed by the following SQL query?

SQL> SELECT A.From, B.To FROM train_info A, train_info B

WHERE A.To = B.From;

- (a) No record (b) 1 record (c) 2 records (d) None of these

80. The SQL statement

SQL> SELECT COUNT(*) FROM train_info A, train_info B

WHERE A.start_city = B.start_city AND A.destination_city = B.destination_city;

will print,

- (a) 6 (b) 7 (c) 8 (d) none of these

81. The SQL statement

SQL> SELECT COUNT(*) FROM train_info A, train_info B

WHERE A.start_city = B.start_city AND A.destination_city = B.destination_city

AND A.trainNum <> B.trainNum;

will print,

- (a) 0 (b) 1 (c) 2 (d) none of these

82. The SQL statement

SQL> SELECT COUNT(*) FROM train_info A, train_info B, train_info C;

will print,

- (a) 6 (b) 18 (c) 12 (d) 216

***90.** The SQL statement

```
SQL> SELECT A.From, B.From FROM train_info A, train_info B  
      GROUP BY(A. From, B. From)  
      HAVING A.From = 'Vijayawada';
```

will print,

- (a) 3 records (b) 4 records (c) 5 records (d) 6 records

91. Choose the correct statements.

- (a) Column alias cannot be used in the ORDER BY clause
(b) Column alias can be used in the ORDER BY clause
(c) Column alias can be used in the WHERE clause
(d) Column alias cannot be used in the WHERE clause

92. The WHERE clause - WHERE city LIKE '%a_%b'
cannot display

- (a) ab (b) abb (c) a_b (d) a_%b

***93.** Choose the correct statements.

- (a) FALSE AND NULL is FALSE (b) TRUE AND NULL is NULL
(c) NOT NULL is NULL (d) FALSE OR NULL is NULL

***94.** Choose the correct statement that is based on a SQL query that has its ORDER BY clause defined as ORDER BY name, game DESC

- (a) Vijay, Golf will be listed before Anand, Chess
(b) Anand, Chess will be listed before Vijay, Golf
(c) Bhupathi, Tennis will be listed before Anand, Chess
(d) Bhupathi, Tennis will be listed before Vijay, Golf

***95.** Which of the following SELECT statements print the string 56?

- (a) SELECT SUBSTR('123456', 5) FROM DUAL ;
(b) SELECT SUBSTR('123456', -2) FROM DUAL ;
(c) SELECT SUBSTR('123456', 5, 2) FROM DUAL ;
(d) SELECT SUBSTR('123456', -2, 2) FROM DUAL ;

***96.** The SQL statement

```
SELECT LPAD('abcd',10,'wert') FROM DUAL ;
```

prints,

- (a) wertweabcd (b) abcdwertwer (c) wertwertab (d) abwertwert

***97.** The SQL statement

```
SELECT ROUND(45.926, -2) FROM DUAL ;
```

- (a) is illegal (b) prints garbage (c) prints 45.92 (d) prints 0

98. Choose the correct statements.

The SQL statement

```
SELECT SYSDATE FROM DUAL ;
```


125. Statement 7 cannot be replaced by the statement
(a) my_proc(input2, input1, input3); (b) my_proc(input2, input2, input2);
(c) my_proc(input3, input1, input2); (d) none of these
126. Statement 7 cannot be replaced by the statements
(a) my_proc(2, 3, 4); (b) my_proc(2, input3, input2);
(c) my_proc(2, 3, input3); (d) all of these
127. Suppose a procedure my_proc is created with no formal parameter. Which of the following calls is correct?
(a) my_proc (b) my_proc; (c) my_proc() (d) my_proc();
128. Which of the following cannot be anonymous?
(a) Procedure (b) Function (c) Package (d) None of these
129. The design of PL/SQL language has a lot of similarities with the design of
(a) COBOL (b) ORACLE (c) ADA (d) LISP
- *130. Which of the following formal parameter declarations (inside the definition of a PL/SQL procedure or function) are not acceptable?
(a) last_name IN OUT VARCHAR2(30) (b) last_name IN VARCHAR2
(c) last_name IN VARCHAR2 (d) last_name OUT VARCHAR2(30)
131. Which of the following can be used to print the description about an error in a PL/SQL program?
(a) SQLERRM (b) ERR_MESG (c) CURR_ERROR (d) DISP_ERR
- *132. If a function does not modify the database state, its purity level is
(a) RNDS (b) WNPS (c) RNPS (d) WNDS
133. Which of the following types of triggers can be fired on DDL operations?
(a) Instead-Of Trigger (b) DML Trigger (c) system Trigger (d) DDL Trigger
134. If a trigger is fired by an INSERT statement, the values of :old and :new are respectively
(a) NULL and the value that is inserted
(b) a garbage value and the value that is inserted
(c) NULL and NULL
(d) the value that is inserted and the value that is inserted
135. To have a variable in global scope, declare it inside a
(a) function (b) procedure (c) package (d) none of these
136. In a PL/SQL code, uninitialized variables of type VARCHAR2 will have
(a) garbage value (b) NULL value (c) 0 value (d) none of these
137. Choose the correct statements.
(a) The n in CHAR(n) can be missing in the declaration.
(b) The n in CHAR(n) is mandatory in the declaration.
(c) If the n in CHAR(n) is missing in the declaration, it defaults to 1.
(d) If a 5 character string is stored in a variable that had been declared as CHAR(10), the string will be right padded with blanks to make it a 10 character string.

138. Consider the declaration
abc tableName%ROWTYPE;
The field names of abc
(a) are undefined
(b) are \$1, \$2, ...
(c) will be the column names of tableName
(d) none of these
- *139. Which of these are true of Collection types?
(a) They store data of the same data type.
(b) They are sparse.
(c) They are unconstrained.
(d) They can store data of different data type.
140. Which of the following keywords is used in the declaration of a PL/SQL function but not a procedure?
(a) RETURN (b) BEGIN (c) END (d) EXCEPTION
141. Which of the following are cursor operations?
(a) OPEN (b) CLOSE (c) FETCH (d) DECLARE
142. Choose the correct statements.
(a) ROWCOUNT of an implicit cursor gives the total number of rows matched by the query.
(b) ROWCOUNT of an explicit cursor gives the total number of rows fetched so far.
(c) ROWCOUNT of an implicit cursor gives the total number of rows fetched so far.
(d) ROWCOUNT of an explicit cursor gives the total number of rows matched by the query.
143. In PL/SQL
(a) a block can access variables that are declared in the enclosing block
(b) a block can access variables that are declared in the enclosed block
(c) a block cannot access variables that are declared in the enclosing block
(d) a block cannot access variables that are declared in the enclosed block
144. Which of the following are pre-defined error conditions?
(a) NO_DATA_FOUND
(b) TOO_MANY_ROWS
(c) CASE_NOT_FOUND
(d) DUP_VAL_ON_INDEX
145. Choose the correct statements.
In a PL/SQL code
(a) if the current block is not having the exception handler, the enclosing block will be searched for one

151. Consider the flowchart in Fig. 16.2.

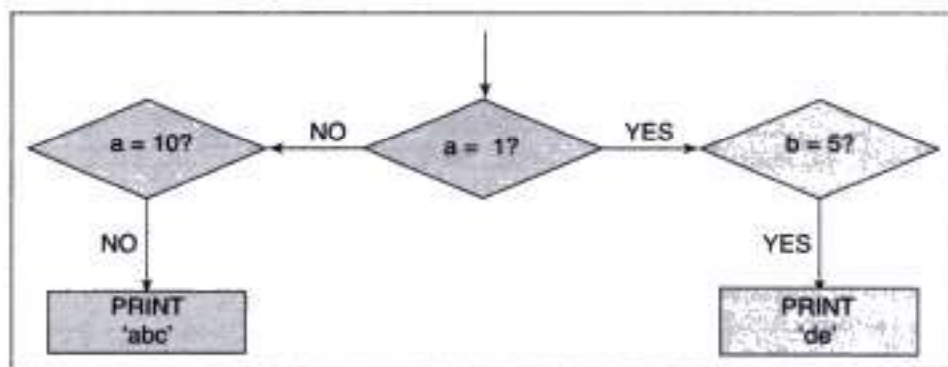


Fig. 16.2

Which of the following codes correctly implement this flowchart?

- | | |
|---|--|
| <p>(a) IF (a = 1) THEN
BEGIN
 IF (b = 5) THEN
 DBMS_OUTPUT.PUT_LINE('de');
 END IF;
END;
ELSE IF (a <> 10) THEN
 DBMS_OUTPUT.PUT_LINE('abc');
END IF;
END IF;</p> | <p>(b) IF (a = 1) THEN
 IF (b = 5) THEN
 DBMS_OUTPUT.PUT_LINE('de');
 ELSE IF (a <> 10) THEN
 DBMS_OUTPUT.PUT_LINE('abc');
 END IF;
END IF;</p> |
| <p>(c) IF (a = 1) THEN
BEGIN
 IF (b = 5) THEN
 DBMS_OUTPUT.PUT_LINE('de');
 END IF;
END;
ELSE IF (a = 10) THEN
 NULL;
 ELSE DBMS_OUTPUT.PUT_LINE('abc');
END IF;
END IF;</p> | <p>(d) None of these</p> |

152. Which of the following is not a collection type in PL/SQL?

- | | | | |
|-------------|---------------------|-------------------|-------------------|
| (a) Varrays | (b) Index-By tables | (c) Nested Tables | (d) None of these |
|-------------|---------------------|-------------------|-------------------|

153. Which of the following is not a valid parameter mode?

- | | | | |
|--------|---------|------------|-------------------|
| (a) IN | (b) OUT | (c) IN OUT | (d) None of these |
|--------|---------|------------|-------------------|

Questions 154 to 212 are from FORMS.

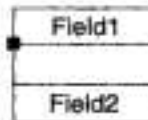
- 154.** A compiled form module has the extension
(a) fmb (b) fmx (c) exe (d) obj
- 155.** The attributes of a Form object can be found in the
(a) layout editor (b) program editor (c) property navigator (d) property palette
- 156.** If the values of the properties of a RELATION in a master-detail Form violates the constraints set forth in the database tables then
(a) it results in an error
(b) it results in a warning
(c) what is defined in the database overrides what is defined in the RELATION
(d) what is defined in the RELATION overrides what is defined in the database
- 157.** Which of the following triggers can be used to disable the function keys?
(a) WHEN-BUTTON-PRESSED Trigger (b) KEY-NULIFY Trigger
(c) WHEN-NEW-FORM-INSTANCE Trigger (d) KEY-OTHERS Triggers
- 158.** A canvas is displayed in
(a) an enclosing canvas (b) a tabbed page (c) a dialog box (d) a window
- *159.** When a WHEN-VALIDATE-ITEM trigger fails, it
(a) terminates the Form (b) displays a message in a dialog box
(c) displays a message in the status line (d) none of these
- 160.** A Data Block in a Form can be based on a
(a) table (b) view (c) stored procedure (d) none of these
- 161.** An LOV can be populated by
(a) a record group (b) a static list of values
(c) an object group (d) an exception
- 162.** During execution, the mode of a Data Block in a Form has to be
(a) Normal or Query (b) Normal or Enter Query
(c) Query or Enter Query (d) Normal or Query or Enter Query
- 163.** Trigger code is written in
(a) SQL (b) PL/SQL (c) JAVA (d) Machine Language
- 164.** The default tab order of the items displayed in a Form is
(a) determined by the physical ordering of the items in the object navigator
(b) determined by the order in which they are stored in the database table
(c) determined by their size
(d) unpredictable
- 165.** Which of the following is typically used to inform the user of the occurrence of a specific event?
(a) LOV (b) Exception (c) Alert (d) Boiler Plate
- 166.** In a master-detail Form, more number of records is usually displayed in the
(a) master block (b) detail block (c) neither (a) nor (b) (d) none of these

167. To programmatically set a **RELATION** property in a master-detail Form, use the
- (a) **SET_RELATION_PROPERTY** built-in
 - (b) **SET_RELATION** built-in
 - (c) **DEFINE_RELATION_PROPERTY** built-in
 - (d) **DEF_RELATION_PROPERTY** built-in
168. Which of the following statements about windows, canvases, and data items is correct?
- (a) A window is placed on a data item, which is displayed in a canvas.
 - (b) A canvas is placed on a data item, which is displayed in a window.
 - (c) A data item is placed on a window, which is displayed in a canvas.
 - (d) A data item is placed on a canvas, which is displayed in a window.
169. Choose the correct statements.
- (a) A data block is associated with a canvas.
 - (b) The size of the canvas can be larger than the size of the window.
 - (c) The size of the canvas can be smaller than the size of the window.
 - (d) All of the above are correct.
170. The items of a data block can be grouped within a
- (a) record group (b) program unit (c) frame (d) data store
171. A set of properties can be collectively assigned to an object by using
- (a) record group (b) object group (c) array (d) property class
172. In a master-detail Form, the records in the detail data block are not retrieved immediately when the
- (a) deferred property is set to Yes and the Automatic Query property is set to No.
 - (b) deferred property is set to Yes and the Automatic Query property is set to Yes.
 - (c) deferred property is set to No and the Automatic Query property is set to No.
 - (d) deferred property is set to No and the Automatic Query property is set to Yes.
173. You cannot navigate to a data item if it is a
- (a) button (b) display item (c) text item (d) check box
174. Records retrieved by a data block can be filtered by appropriately setting the value of the
- (a) where clause property (b) number of records returned property
 - (c) select clause property (d) all of these
- *175. Which of the following comments about **HINT** are correct?
- (a) It is an item property.
 - (b) It is automatically displayed when the associated item receives the input focus.
 - (c) It may not be automatically displayed when the associated item receives the input focus.
 - (d) None of the above are correct.
176. Which of the following is a collection of Form components?
- (a) Record Group (b) Record Set (c) Data Store (d) Object Group
177. Which of the following is not a parameter to **SET_BLOCK_PROPERTY**?
- (a) Block Name (b) Property Name (c) Value (d) None of these

178. Suppose that a WHEN-VALIDATE-ITEM trigger and a POST-TEXT-ITEM trigger are defined for a particular text item. Which of them will be fired first?
- (a) POST-TEXT-ITEM
 - (b) WHEN-VALIDATE-ITEM
 - (c) Unpredictable
 - (d) Both of them will be fired simultaneously
179. To debug a PL/SQL code that is within a Form, appropriate messages can be displayed at different points in the execution flow using the built-in
- (a) print
 - (b) display
 - (c) show
 - (d) message
180. In a Form, trigger cannot be defined at
- (a) Form level
 - (b) data block level
 - (c) data item level
 - (d) none of these
181. Which of the following properties of a RELATION determines how to handle records in the detail data block if the associated record in the master data block is deleted?
- (a) Deferred
 - (b) Automatic Query
 - (c) Delete Record Behavior
 - (d) None of these
182. Let BN be the block name and DIN be the data item name. To reference DIN the syntax to be used is
- (a) BN.DIN
 - (b) BN.DIN
 - (c) DIN
 - (d) 'BN.DIN'
183. Choose the correct statements.
- (a) An unrestricted built-in can be called by any trigger code.
 - (b) A restricted built-in can be called by any trigger code.
 - (c) Restricted built-ins have something to do with the Form navigation.
 - (d) Unrestricted built-ins have something to do with the Form navigation
184. The value of the "Delete Record Behavior" property of a RELATION in a master-detail Form can be
- (a) cascading
 - (b) isolated
 - (c) non-isolated
 - (d) none of these
185. To reference a parameter ParamA that is defined in a Form, the syntax to be used is
- (a) :parameter.ParamA
 - (b) parameter.ParamA
 - (c) parameter:ParamA
 - (d) none of these
- *186. Logically speaking, in general, it is a good idea to set the value of the "Check Box Mapping of Other Values" property to the value of the property
- (a) "Value When Checked"
 - (b) "Value When Unchecked"
 - (c) NULL
 - (d) none of these
187. You want to prevent a user from navigating past the last record in a data block. The natural choice to enforce this, is through a
- (a) block level trigger
 - (b) form level trigger
 - (c) item level trigger
 - (d) application level trigger
188. You want to prevent a user from navigating past the last record in a data block. The code used to implement this feature uses
- (a) parameter variable
 - (b) global variable
 - (c) system variable
 - (d) none of these

- (c) This feature cannot be implemented through Check Boxes or Radio Buttons.
 - (d) None of the above is correct.
- *198.** If a trigger code assigns a value to a Check Box that neither matches the "Value When Checked" nor the "Value When Unchecked", the Check Box will be
- (a) Checked
 - (b) Unchecked
 - (c) unpredictable
 - (d) none of these
- *199.** Which of the following list items is a good choice to implement lists that are long?
- (a) Combo Box
 - (b) Poplist
 - (c) Tlist
 - (d) Llist
- 200.** Which of the following can be used to create variables that can be accessed by any Form executing in the current Form session?
- (a) System variables
 - (b) Parameter variables
 - (c) Global variables
 - (d) None of these
- *201.** A calculated item in a Form can be used to compute
- (a) sum
 - (b) average
 - (c) maximum
 - (d) variance
- 202.** Which of the following button does not appear when an LOV is listed?
- (a) Find
 - (b) OK
 - (c) Cancel
 - (d) None of these
- 203.** Which of the following is not a type of canvas?
- (a) Content
 - (b) Vertical toolbar
 - (c) Tab
 - (d) None of these
- 204.** In a master-detail Form, RELATION is
- (a) an object belonging to the master data block
 - (b) an object belonging to the detail data block
 - (c) an object that belongs neither to the master data block nor the detail block.
 - (d) not an object
- 205.** Which of the following is the plug-in that facilitates interaction between the FORMS server and the web browser?
- (a) JInitiator
 - (b) JApplet
 - (c) IDE
 - (d) WebFor
- 206.** A canvas is displayed when
- (a) an item in the canvas receives the input focus
 - (b) the window that is associated with the canvas is opened
 - (c) the data block that is associated with the canvas is opened
 - (d) all of these
- 207.** Which of the following built-ins can be used to launch a new Form from within a Form?
- (a) Call_Form
 - (b) New_Form
 - (c) Open_Form
 - (d) None of these
- 208.** Setting the value of the system variable MESSAGE_LEVEL to 0
- (a) results in the suppressing of all the messages irrespective of their severity
 - (b) does not suppress the display of any message
 - (c) will result in syntax error
 - (d) is desirable when the Form is moved from development to production
- 209.** Which of the following list items is the worst choice to implement lists that are long?
- (a) Combo Box
 - (b) Poplist
 - (c) Tlist
 - (d) None of these

- 236.** The address of a customer usually spans 4 lines – Address Line 1, Address Line 2, Address Line 3, and Address Line 4. Some customers don't have Address Line 2. The invoice when printed will show an empty second line for such customers. How do you prevent this from happening?
- (a) This cannot be prevented (b) By using anchors
(c) By using format triggers (d) By using anchors and format triggers
- 237.** Let Field1 and Field2 be two fields that are connected by an anchor as follows.



Field1 is the Parent Object and Field2 is the Child Object. The values of the Child Edge Type and Child Edge Percent can be

- (a) Top, 0 respectively (b) Bottom, 100 respectively
(c) Left, 100 respectively (d) Left, 0 respectively
- 238.** If the After Parameter trigger fails
- (a) nothing happens (b) the Report gets terminated abruptly
(c) you will be put in the parameter form again (d) none of the above
- 239.** Consider the query `SELECT * FROM EMP WHERE deptno = :abc;`
Let there be a Validation Trigger for the variable `abc` that is coded as follows.

```

IF (:abc IN (10,20,40)) THEN
    return(TRUE);
ELSE
    return(FALSE);
END IF
  
```

During runtime, if the user enters a value other than 10, 20, or 40,

- (a) the value will be discarded (b) the user will be asked to enter another value
(c) an exception will be raised (d) the value will be defaulted to 10
- 240.** An object in a Repeating Frame must
- (a) belong to its associated group or must be from a parent group
(b) belong to its associated group or must be defined at Report level
(c) be from a parent group or must be defined at Report level
(d) belong to its associated group or must be from a parent group or must be defined at Report level

Answers

- | | | | | |
|-------------|----------|-------|--------|-------------|
| 1. a,b,c | 2. c | 3. d | 4. b,d | 5. a,c |
| 6. d | 7. a,b,c | 8. d | 9. d | 10. c |
| 11. a,b,c,d | 12. a,b | 13. a | 14. d | 15. a,b,c,d |
| 16. a | 17. d | 18. c | 19. c | 20. b |

21. a,b,c,d	22. d	23. b	24. b	25. b
26. d	27. a,b,c	28. b	29. a	30. b,c
31. d	32. b	33. b	34. d	35. c
36. a	37. a	38. d	39. c	40. d
41. d	42. a	43. a	44. d	45. a
46. c	47. a	48. c	49. c	50. b
51. c	52. c	53. b	54. c	55. a
56. b,c,d	57. c	58. a	59. c	60. d
61. a	62. d	63. d	64. a,b	65. a
66. a,b	67. c	68. b	69. b	70. a
71. c	72. a	73. d	74. d	75. d
76. d	77. c	78. c	79. c	80. c
81. c	82. d	83. b	84. d	85. d
86. b	87. b	88. c	89. d	90. a
91. b,d	92. a,b	93. a,b,c,d	94. d	95. a,b,c,d
96. a	97. d	98. a,b,c,d	99. a	100. c
101. a	102. a	103. d	104. a	105. b
106. d	107. d	108. d	109. a	110. d
111. b	112. d	113. c	114. b,d	115. d
116. d	117. a,c	118. d	119. c	120. a
121. b,c,d	122. b	123. d	124. c	125. d
126. a,c	127. b	128. c	129. c	130. a,d
131. a	132. d	133. c	134. a	135. c
136. b	137. a,c,d	138. c	139. a,b,c	140. a
141. a,b,c,d	142. a,b	143. a,d	144. a,b,c,d	145. a,b,c
146. a,b,c	147. d	148. a	149. b,d	150. c
151. a,c	152. d	153. d	154. b	155. d
156. a	157. d	158. d	159. d	160. a,b,c
161. a,b	162. d	163. b	164. a	165. c
166. b	167. a	168. d	169. b,c	170. c
171. d	172. a,b	173. b	174. a	175. a,c
176. d	177. d	178. b	179. d	180. d
181. c	182. b	183. a,c	184. a,b,c	185. a
186. b	187. a	188. c	189. a	190. a,b,c
191. b	192. c	193. a,b,c	194. c	195. a,d
196. d	197. b	198. d	199. a	200. c
201. a,b,c,d	202. d	203. d	204. a	205. a
206. a,b	207. a,b,c	208. b	209. c	210. c
211. d	212. a	213. c	214. d	215. b
216. c	217. b	218. d	219. a,b,c	220. a
221. c	222. a	223. a	224. a,b	225. c
226. c	227. a,b,c	228. a	229. a	230. d
231. b,c	232. a	233. a,d	234. c	235. d
236. d	237. a,d	238. c	239. c	240. d

46. It prints all possible x, y where x can be one of the 10 values – 2001, 2002, ..., 2010 and y can be one of the 10 values – 2001, 2002, ..., 2010, giving us $10 \times 10 = 100$ rows.
49. Because CustNum 1008 ordered neither a pen nor a pencil.
50. The 8 rows are 1001, 1002, 1006, 1009, 1001, 1002, 1007, 1009.
51. This query lists out all CustNum who ordered pen and pencil.
52. This query lists out 1003, 1004, 1005, 1008, 1009, and 1010. You might have missed 1009 thinking the order includes pen/pencil. If you analyze the query you will find that 1009 is included because order 2009 includes table.
53. The CustNum 1009 will be displayed.
54. The CustNum that are displayed are 1003 and 1005.
55. Every CustNum ordered at least one of table, chair, pen or pencil. So, the first query returns all the 10 CustNum. For similar reasons, the second query also returns all the 10 CustNum.
57. If it is 20, this query counts and displays all CustNum who placed order for an item that is worth more than Rs.20. The possible items are table and chair. There are exactly 6 CustNum who ordered for a table or chair.
58. This query finds and displays the CustNum who placed the most recent order.
59. BETWEEN includes the end values.
60. `SELECT SUBSTR(TO_CHAR(SYSDATE), 8) FROM DUAL`, displays the string 05. The given query finds and displays those CustNum who placed order in the year 05.
62. NULL is not equal to NULL
63. Option (a) prints 0.
Option (b) prints 2.
Option (a) prints -2.
67. You can verify by executing the PL/SQL code

```
IF LENGTH('') IS NULL THEN
    DBMS_OUTPUT.PUT_LINE('Hi') ;
ELSE
    DBMS_OUTPUT.PUT_LINE('Bye') ;
END IF;
```

This will print Hi
71. ALL is optional. Its presence or absence doesn't change the output. Unlike DISTINCT, it allows duplicates in the output.
72. `NVL(NULL, 3)` returns 3. So, `NVL(NVL(NULL, 3), 4)` is equivalent to `NVL(3, 4)`
73. This query counts the number of employees who get more than the maximum salary.
74. NULL is neither equal to NULL nor not equal to NULL.
77. Simple Join is yet another name for Equijoin.
79. It prints the two records

From	To
Chennai	New Delhi
Chennai	Agra

- SUBSTR('123456', -2) extracts the substring starting at the second location from the last (because of the - sign) till the end.
- SUBSTR('123456', 5, 2) extracts the substring of length 2 (the third (optional) argument specifies the length) starting at location 5 (the count starts from 1).
- SUBSTR('123456', -2) extracts the substring of length 2 starting at the second location from the last (because of the - sign)
96. LPAD('abcd',10,'wert') means, in a field of length 10, pad the string 'abcd' on the left side with the string 'wert'
 97. ROUND(45.926,-2) rounds 2 decimal places to the left of the decimal point (left because of the - sign). This essentially means round to the nearest hundred. So, 45 will be rounded to 0
 99. NVL(NVL(NULL, NVL(NULL, 3)), 4) is equivalent to NVL(NVL(NULL, 3), 4), which is equivalent to NVL(3, 4)
 101. SELECT SUBSTR('myname@abcd.com', INSTR('myname@abcd.com', '@', 1) + 1) FROM DUAL;
prints whatever that comes after the @ character which is the domain name.
 103. Whenever a NOT IN list includes NULL, this is what happens.
 106. ROWNUM is a pseudo-column that is used to label the rows of the result set. This query cannot return any row because if it returns a row (or more than one row) the first record must have a ROWNUM of greater than 5. But the first row will have the ROWNUM 1.
 107. NULL in (NULL) is logically equivalent to NULL = NULL
 108. TRUNC(45.926,-2) truncates 2 decimal places to the left of the decimal point (left because of the - sign). The 45 will be made 0
 109. IS NULL is the right way to check if something is NULL.
 130. You cannot specify the size
 132. WNDIS stands for Writes No Database State.
WNPS stands for Writes No Package State.
RNDIS stands for Reads No Database State.
RNPS stands for Reads No Package State.
 139. They are sparse, meaning a row exists only when it is assigned a value. They are unconstrained, meaning rows can be added dynamically.
 159. It puts the input focus back in the data item that caused the validation failure.
 175. Only if the "Display Hint Automatically" property is set, it will be displayed automatically.
 186. For the same reason a Boolean variable is initialized to FALSE rather than TRUE at declaration.
 193. There are certain items that cannot receive the input focus. Such items cannot have a Hint associated to them. The Tooltip displays the message when the cursor is over the item.
 198. The "Check Box Mapping of Other Values" property determines if the Check box is Checked or Unchecked.
 199. Combo Box lets the user search the list by typing the first few characters of the search value. Note that LOV is the best choice to implement a list that is long.
 201. It can also be used to count, compute standard deviation and find the minimum.
 234. Because the data type of a bind variable is CHAR by default.