

Mock Test Paper

1. What type of synonym would be created by the following statement?

```
CREATE SYNONYM division_syn FOR division;
```

 - a. Public synonym
 - b. Private synonym
 - c. Schema synonym
 - d. Sequence-based synonym

2. Which of the following statements could be used to create a composite B-tree index?
 - a.

```
CREATE INDEX mess_idx ON message (message_text, message_date);
```
 - b.

```
CREATE BITMAP INDEX mess_idx ON message (message_text, message_date);
```
 - c.

```
CREATE INDEX mess_idx ON message (message_text);
```
 - d.

```
CREATE INDEX mess_idx FOR message (message_text, message_date);
```

3. Which of the following datatypes could store the value "Model Airplane" without an error?
 - a. VARCHAR2(15)
 - b. CHAR(12)
 - c. NUMBER(15)
 - d. VARCHAR2(12)

4. What function is often used to mitigate the negative effects of NULL values in a subquery?
 - a. AVG()
 - b. NVL()
 - c. Any multi-row function
 - d. TO_CHAR()

5. Which of the following statements would group its output by project_id and limit it to maximum values for login_count greater than 1000?
 - a.

```
SELECT project_id, max(login_count)
FROM employee
GROUP BY project_id
HAVING max(login_count) > 1000;
```
 - b.

```
SELECT project_id, max(login_count)
FROM employee
GROUP BY project_id
HAVING min(login_count) > 1000;
```
 - c.

```
SELECT project_id, max(login_count)
FROM employee
GROUP BY project_id
HAVING project_id > 1000;
```
 - d.

```
SELECT project_id, max(login_count)
FROM employee
GROUP BY project_id;
```

6. Given a value for website_url that is http://www.companylink.com/ dperez where website_id is 3, what would be the output of the following statement?

```
SELECT SUBSTR(website_url, -4, 8)
FROM website
WHERE website_id = 3;
```

 - a. dperez
 - b. perez
 - c. erez
 - d. erezhttp

7. If we are required to construct an equi join of 30 tables, how many join conditions will be required?
 - a. 30
 - b. 20
 - c. 29
 - d. The number cannot be determined

8. Which of the following statements will correctly sort data, first by the employee's gender, then by their last name?
 - a. `select first_name, last_name, gender from employee order by last_name, gender;`
 - b. `select first_name, last_name, gender from employee order by gender, 2;`
 - c. `select first_name, last_name, gender from employee order by gender, first_name;`
 - d. `select first_name, last_name, gender from employee order by 2, 1, 3;`

9. Which of these statements will satisfy the request "display the first name, last name, and gender of all the employees in the EMPLOYEE table"?
 - a. `select first_name, last_name, gender from employee;`
 - b. `select first_name, last_name gender from employee;`
 - c. `select first_name last_name, gender from employee;`
 - d. `select first_name, last_name, dob from employee;`

10. Which of the following DELETE statements is syntactically correct?
 - a. `DELETE * FROM branch WHERE branch_id = 5;`
 - b. `DELETE WHERE branch_id = 5 FROM branch;`
 - c. `DELETE * WHERE branch_id = 5 FROM branch;`
 - d. `DELETE FROM branch WHERE branch_id = 5;`

11. Given an employee named Ken White with an employee_id of 7, what two values are returned from the following query?

```
SELECT INITCAP(first_name), LOWER(last_name)
FROM employee WHERE employee_id = 7;
```

- a. Ken White
 - b. Ken white
 - c. ken white
 - d. kEN WHITE
12. What would be the three values outputted, in order, from this statement?

```
SELECT ROUND(3.14159, 4),
TRUNC(3.14159, 3),
ROUND(TRUNC(3.14159, 4), 2)
FROM DUAL;
```

- a. 3.141, 3.14, 3.1
 - b. 3.1416, 3.141, 3.14
 - c. 3.1415, 3.142, 3.14
 - d. 3.1416, 3.142, 3.14
13. Which of the following statements containing GROUP BY is syntactically incorrect?

- a.

```
SELECT gender, avg(login_count)
FROM employee
GROUP BY gender;
```
- b.

```
SELECT gender, avg(login_count)
FROM employee
WHERE login_count > 800
GROUP BY gender;
```
- c.

```
SELECT gender, avg(login_count)
FROM employee
GROUP BY gender
ORDER BY avg(login_count);
```

- d. `SELECT gender, avg(login_count)`
`FROM employee`
`GROUP BY gender`
`WHERE login_count > 800;`
14. Given a multi-row subquery is used in a statement, which operator will match values in the outer query that are less than the highest value returned by the subquery?
- a. `<ANY`
 - b. `>ANY`
 - c. `<ALL`
 - d. `>ALL`
15. Which of the following statements could be used to create a bitmap index?
- a. `CREATE INDEX emp_bidx ON employee (gender);`
 - b. `CREATE BITMAP INDEX emp_bidx USING employee (gender);`
 - c. `CREATE BITMAP INDEX emp_bidx ON employee (gender);`
 - d. `CREATE INDEX emp_bidx ON employee (gender) TYPE (BITMAP);`
16. Given the following SQL join statement, which line will cause an error?
- a. `SELECT award_id, date_awarded`
 - b. `FROM award a, employee_award ea`
 - c. `WHERE a.award_id = ea.award_id;`
 - d. No error would be generated
17. Which of these statements about sorting is NOT true?
- a. Oracle is capable of doing both numeric and lexicographic sorts
 - b. Data is automatically sorted when it is inserted into Oracle tables
 - c. The `ORDER BY` clause always follows the `FROM` clause in SQL
 - d. Sorting is achieved through use of the `ORDER BY` clause

18. A SQL programmer intends to make use of a subquery that forms an in-line view. In order to do this, the subquery must be used with what clause?
- FROM
 - WHERE
 - HAVING
 - ORDER BY
19. Which SQL set operator can be used to subtract the results of one query from another?
- INTERSECT
 - UNION
 - UNION ALL
 - MINUS
20. Given a table, `profile`, with a column called `profile_id` that has a datatype of `number(10)` and contains no data, what would be the outcome of the following statement?
- ```
ALTER TABLE profile MODIFY (profile_id varchar2(4000));
```
- The statement will error since a number database cannot be changed to a `varchar2`
  - The statement will error since a length of 4,000 is beyond the maximum for the `varchar2` datatype
  - The statement will successfully change the `profile_id` column from `number` to `varchar2`
  - The statement will not error but the datatype will not be changed to `varchar2`
21. Given a table with 200 rows containing a column, `SALARY`, where 40 of the values for `SALARY` are `NULL`, what would be the result of issuing a `COUNT(*)` in a statement?
- 200
  - 160
  - 40
  - `NULL`

22. Given a value for `website_url` that is `http://www.companylink.com/dperez` where `website_id` is 3, what would be the output of the following statement?

```
SELECT SUBSTR(website_url, 6, 6)
FROM website
WHERE website_id = 3;
```

- a. `www`
  - b. `www.`
  - c. `//www.`
  - d. `//www.c`
23. Which of the following statements could be used to compute the same value as the following statement?

```
SELECT avg(login_count) FROM employee;
```

- a. `SELECT stddev(login_count) FROM employee;`
  - b. `SELECT stddev(login_count) * variance(login_count) FROM employee;`
  - c. `SELECT sum(login_count) / count(login_count) FROM employee;`
  - d. `SELECT min(login_count) * max(login_count) FROM employee;`
24. Given two tables named `employee` and `project`, which of these WHERE clauses is a correct example of a join using the alias notation?

- a. `WHERE project_id = project_id`
- b. `WHERE e.project_id = p.project_id`
- c. `WHERE employee_project_id = project_project_id`
- d. `WHERE employee.project_id = project.project_id`

25. In which of these statements is case preserved?

- a. `SELECT * from employee;`
- b. `select first_name "My Name" from employee;`
- c. `SELECT BLOG_ID FROM BLOG;`
- d. `SELECT diSTINCT branch_ID, BRANCH_name from branch;`

26. Which of these statements would correctly satisfy the request, Display the message text where the message ID is greater than or equal to 4 and less than or equal to 8?
- a. Select message\_text from message  
where message\_id between 4 and 8;
  - b. select message\_text from message  
where message\_id >= 4 and <= 8;
  - c. select message\_text from message  
where message\_id > 4 and message\_text < 8;
  - d. select message\_text from message  
where message\_id between 8 and 4;
27. Given a view has been created using the command below, what columns would be displayed when the following query is executed?
- ```
CREATE VIEW proj_vw  
AS  
SELECT project_name, project_mgr_id  
FROM project;  
  
SELECT * FROM proj_vw;
```
- a. project_name
 - b. project_mgr_id
 - c. project_name and project_mgr_id
 - d. None. The creation of the view fails with an error.
28. Which of the following datatypes stores alphanumeric data in a variable length format?
- a. CHAR
 - b. NUMBER
 - c. DATE
 - d. VARCHAR2

29. Which format mask below would produce a date in the following format?
October 27, 1999 @14.23.15
- a. 'MONTH DD, YYYY @HH:MI:SS'
 - b. 'Month DD, YYYY @HH24:MM:SS'
 - c. 'Month DD, YYYY @HH:MI:SS'
 - d. 'Month DD, YYYY @HH24:MI:SS'
30. Functions that take a row of data as input and return a corresponding single value are known as
- a. dual-row functions
 - b. multi-row functions
 - c. single-row functions
 - d. transformation functions
31. What will be the result of the following SQL statement?
- ```
SELECT division_name, division_id, branch_name
FROM division div, branch brch
WHERE div.division_id = brch.division_id;
```
- a. A successful join with three columns and 13 rows
  - b. A successful join with two columns and 13 rows
  - c. A division by zero error
  - d. An ORA-00918 error – column ambiguously defined
32. What is the output of the following query?
- ```
SELECT blog_url, min(hit_count)  
FROM blog;
```
- a. 123
 - b. 18
 - c. 0
 - d. A "not a single-group function" error is returned.
33. In a correlated subquery, which subquery is evaluated first?
- a. The inner query
 - b. The outer query
 - c. Neither query
 - d. Both queries are evaluated simultaneously

34. Which of the following is not a valid use of mathematical operators in SQL?
- a. `select hit_count + 14 from website;`
 - b. `select start_date - signup_date from employee;`
 - c. `select employee_id * street_address from address;`
 - d. `select 20 * 2 from dual;`
35. Which of the following terms describes a way to classify the types of data that are possible in a particular column?
- a. Function
 - b. Datatype
 - c. Formula
 - d. Sub-query
36. Which of the following GROUP BY statements is both logically and syntactically correct?
- a. `SELECT project_id, sum(login_count)`
`FROM employee`
`GROUP BY employee_id;`
 - b. `SELECT project_id, sum(login_count)`
`FROM employee`
`GROUP BY project_id;`
 - c. `SELECT project_id, login_count`
`FROM employee`
`GROUP BY project_id;`
 - d. `SELECT project_id, gender, sum(login_count)`
`FROM employee`
`GROUP BY project_id;`
37. Which of the following statements will successfully create a B-tree index?
- a. `CREATE BITMAP INDEX emp_idx ON employee (division_id);`
 - b. `CREATE INDEX emp_idx FOR employee (division_id);`
 - c. `CREATE INDEX emp_idx ON employee;`
 - d. `CREATE INDEX emp_idx ON employee (division_id);`

38. Assuming a column, `blog_number`, exists in the `blog` table, which of the following modifications to the `blog` table is syntactically correct?
- `ALTER TABLE MODIFY (blog_number number(5));`
 - `ALTER TABLE blog MODIFY (blog_number number(5));`
 - `ALTER TABLE blog MODIFY COLUMN (blog_number number(5));`
 - `ALTER TABLE blog MODIFY (blog_number datatype number(5));`
39. Given the following statement, what would be the output?
- ```
SELECT REPLACE(REPLACE('Follow the yellow brick road','o', '0'),
 'e',
 '3')
FROM dual;
```
- Follow the yellow brick road
  - F0ll0w the yell0w brick r0ad
  - F0ll0w th3 y3ll0w brick r0ad
  - An error is generated. You cannot nest one `REPLACE()` function within another.
40. Which of the following clauses taken from an SQL statement is a syntactically correct example of Oracle's `JOIN USING` syntax?
- `FROM employee, address JOIN USING (employee_id)`
  - `FROM employee JOIN address USING (employee_id)`
  - `FROM employee JOIN address USING employee_id`
  - `FROM employee e JOIN address a USING (a.employee_id = e.employee_id)`
41. Which of the following `UPDATE` statements is syntactically correct?
- `UPDATE email WHERE email_id = 11;`
  - `UPDATE email WHERE email_id = 11`  
`SET email_address = 'donperez@companylink.com';`
  - `UPDATE email SET email_address = 'donperez@companylink.com'`  
`WHERE email_id = 11;`
  - `UPDATE email`  
`SET email_address TO 'donperez@companylink.com';`

42. Which of the following lines from a CREATE TABLE statement will cause an error?
- a. CREATE TABLE 7\_blog (
  - b. new\_blog\_name varchar2(10),
  - c. old\_blog\_name varchar2(10),
  - d. old\_blog\_id number(4));
43. How does a UNIQUE constraint differ from a PRIMARY KEY?
- a. A UNIQUE constraint enforces unique values, while a PRIMARY KEY does not
  - b. A UNIQUE constraint allows NULL values, while a PRIMARY KEY does not
  - c. A UNIQUE constraint cannot be used as the basis for a FOREIGN KEY relationship
  - d. A UNIQUE constraint does not allow NULL values, while a PRIMARY KEY does
44. What value is returned from the following query?
- ```
SELECT LENGTH((CONCAT('Learning SQL','is fun'))) FROM dual;
```
- a. Learning SQLis fun
 - b. Learning SQL is fun
 - c. 18
 - d. 19
45. Consider the following set of statements. What are the values for the row having branch_id equal to 14 for branch_id, branch_name, and division_id respectively, at the end of the statement?
- ```
INSERT INTO branch VALUES (14, 'Research', 7);
COMMIT;
UPDATE branch SET division_id = 8 WHERE branch_id = 14;
SAVEPOINT saveit;
DELETE FROM branch WHERE branch_id = 14;
ROLLBACK to saveit;
UPDATE branch SET branch_name = 'R and D' WHERE branch_id = 14;
COMMIT;
```
- a. 14, 'Research', 7
  - b. 14, 'R and D', 8
  - c. null, null, null
  - d. An error is returned

46. Given the structure of the branch table shown below, which of these INSERT statements uses correct positional notation?

```
BRANCH_ID NUMBER(10)
BRANCH_NAME VARCHAR2(20)
DIVISION_ID NUMBER(10)
```

- a. INSERT INTO branch (branch\_name, division\_id, branch\_id)  
VALUES ('Executive', 7, 14);
- b. INSERT INTO branch (branch\_name, division\_id, branch\_id)  
VALUES (14, 'Executive', 7);
- c. INSERT INTO branch  
VALUES (14, 'Executive', 7);
- d. INSERT INTO branch  
VALUES ('Executive', 7, 14);

47. Given the following SQL statement, which statement is FALSE?

```
SELECT RPAD(project_name, 31, '*') FROM project;
```

- a. Any value for project\_name that is 31 or more values will have no padding.
- b. The character that will be displayed as padding is the asterisk, \*.
- c. The padding characters appear on the right side of the project\_name value.
- d. Any value for project\_name that is 20 characters in length will have 10 asterisks padded on the right side.

48. Which SQL set operator can be used to combine two result sets and while removing duplicates?

- a. MINUS
- b. UNION
- c. UNION ALL
- d. INTERSECT

49. Which of the following statements would correctly create a function-based index?
- a. CREATE INDEX mess\_mon\_idx ON message (message\_date, 'MON');
  - b. CREATE INDEX mess\_mon\_idx ON message (message\_date, 'MON') TYPE FUNCTION;
  - c. CREATE INDEX mess\_mon\_idx ON message (to\_char(message\_date, 'MON'));
  - d. CREATE FUNCTION BASED INDEX mess\_mon\_idx ON message (to\_char(message\_date, 'MON'));
50. Given a table with 200 rows containing a column, SALARY, where 40 of the values for SALARY are NULL, what would be the result of issuing a COUNT(SALARY) in a statement?
- a. 200
  - b. 160
  - c. 40
  - d. NULL
51. Which of the following represents the proper syntax for a TRUNCATE statement?
- a. TRUNCATE branch;
  - b. TRUNCATE FROM table branch;
  - c. TRUNCATE table branch where branch\_id is null;
  - d. TRUNCATE table branch;
52. Which of these is not a valid SQL statement?
- a. select from award\_date award;
  - b. select website\_url from website;
  - c. select first\_name from employee;
  - d. select \* from message;
53. Which of the following clauses taken from an SQL statement would produce an error?
- a. FROM employee NATURAL JOIN email
  - b. FROM division d NATURAL JOIN branch b
  - c. FROM employee NATURAL JOIN award
  - d. FROM employee JOIN award NATURAL

54. Given the table creation statement below, which of the listed INSERT statements will execute without error?
- ```
CREATE TABLE car (  
  make varchar2(8),  
  model varchar2(15),  
  vin varchar2(10),  
  year number(4));
```
- a. INSERT INTO car VALUES ('Chevrolet', 'Camero', 'YA4JFI84PO', 1979);
 - b. INSERT INTO car VALUES ('Ford', 'Mustang', 'JN1JFI48KD', 2010);
 - c. INSERT INTO car VALUES ('BMW', 'E81', 'RT1OUI55KD', '01-JAN-05');
 - d. INSERT INTO car VALUES ('Toyota', 'Land Cruiser Prado', 'BM7JPL23AQ', 2002);
55. Which of the following statements could be used to rebuild an index?
- a. REBUILD INDEX mess_mon_idx;
 - b. ALTER INDEX mess_mon_idx REBUILD;
 - c. ALTER INDEX REBUILD mess_mon_idx;
 - d. ALTER INDEX mess_mon_idx REBUILD IMMEDIATE;
56. Which of these statements does not make valid use of an alias?
- a. select dob "Date of Birth" from employee;
 - b. select last_name "Last Name" from employee;
 - c. select email_address 'My Email' from email;
 - d. select distinct hit_count as "Hit Count" from website;
57. Which of the following statements would satisfy the requirement, Display employee data for all employees whose first name begins with the letter R?
- a. select first_name, last_name from employee where first_name like '%R';
 - b. select first_name, last_name from employee where first_name like 'R%';
 - c. select first_name, last_name from employee where last_name like '%_R_';
 - d. select first_name, last_name from employee where last_name like 'R%';

58. Which symbol is used to declare an outer join?
- a. (*)
 - b. (+)
 - c. (-)
 - d. %
59. In a non-correlated subquery, which subquery is evaluated first?
- a. The inner query
 - b. The outer query
 - c. Neither query
 - d. Both queries are evaluated simultaneously
60. Which of the following is NOT a term associated with a B-tree index?
- a. Root nodes
 - b. Leaf nodes
 - c. Synthetic key nodes
 - d. Branch nodes
61. Which of the following datatypes stores alphanumeric data in a fixed length format?
- a. CHAR
 - b. VARCHAR
 - c. VARCHAR2
 - d. DATE
62. Which of the following clauses taken from an SQL statement is a syntactically correct example of Oracle's JOIN ON syntax?
- a. FROM employee JOIN address ON (employee_id = employee_id)
 - b. FROM employee e JOIN address a ON (a.employee_id = e.employee_id)
 - c. FROM employee e JOIN address a WHERE (a.employee_id = e.employee_id)
 - d. FROM employee e JOIN ON address a (a.employee_id = e.employee_id)

63. Which of these statements represents the proper use of the SQL WHERE clause syntax?
- a. `select first_name, last_name from employee;`
 - b. `select first_name, last_name where last_name = 'Johnson' from employee;`
 - c. `select first_name, last_name from employee where last_name = 'Johnson';`
 - d. `select first_name, last_name where last_name = 'Johnson';`
64. Given a `TO_CHAR` function that uses a format mask of `'DD-MONTH-YYYY HH24:MI:SS'`,
- which of the following dates could most closely resemble the possible output?
- a. 18-March-2011, 02:22:09 PM
 - b. 01-JAN-2011, 09:15:42
 - c. JUNE 20, 2011, 13:02:01
 - d. 22-APRIL-2011, 15:22:37
65. Assume you have two tables, `test1` and `test2`. The `test1` table has a primary key. The `test2` table has a foreign key that relates back to `test1`'s primary key. Given the following statement, what happens?
- ```
DELETE FROM test1;
```
- a. All values are deleted from the `test1` table
  - b. All values are deleted from the `test1` and `test2` tables
  - c. Zero values are deleted from the `test1` and `test2` tables
  - d. An error occurs
66. Given that two tables have 50 rows and 20 rows, respectively, how many rows would a Cartesian product of the two tables yield?
- a. 50
  - b. 20
  - c. 100
  - d. 1000

67. Which of these statements will produce an error?
- a. `select ' ' || ' ' || award_desc || ' ' from award;`
  - b. `select first_name || ' ' || last_name || 'is a great employee' from employee;`
  - c. `select 'My project id is' || project_id || 'id' from project;`
  - d. `select 'Award ID# ' || award_id || ' was presented on ' || date_ awarded || 'to employee' || employee_id from employee_award;`
68. Which of the following is not a type of database constraint?
- a. FOREIGN KEY
  - b. PRIMARY KEY
  - c. CHECK
  - d. SEQUENCE
69. Consider the following row in the blog table containing the values in the column order of the table.
- ```
6, 'http://www.companylink.com/testpage', 'Test Description', 20
```
- Which of these columns is unchanged if the following UPDATE statement is executed?
- ```
UPDATE blog
SET blog_id = 7,
 blog_desc = 'Test Description2',
 hit_count = 30
WHERE blog_id = 6;
```
- a. blog\_id
  - b. blog\_url
  - c. blog\_desc
  - d. hit\_count
70. Which of the following numeric datatypes could NOT store the value 8479.34 without generating an error?
- a. NUMBER(6,2)
  - b. NUMBER(5,2)
  - c. NUMBER(8)
  - d. NUMBER(8,3)

71. Given a value for `website_url` that is `http://www.companylink.com/dperez` where `website_id` is 3, what would be the output of the following statement?
- ```
SELECT INSTR(website_url, '.', 6, 2) FROM website;
```
- a. 0
 - b. 13
 - c. 17
 - d. 23
72. Which of these is formed when every row of one table is joined to every row of another table?
- a. A truncated product
 - b. An intersecting product
 - c. A Cartesian product
 - d. A union product



To refer to the answers to the *Mock Test Paper*, please download `mock_test_answers.pdf` file from http://www.packtpub.com/sites/default/files/downloads/mock_test_answers.pdf

