

Oracle PL-SQL Job Interview Questions And Answers



Interview Questions Answers

<https://interviewquestionsanswers.org/>

About Interview Questions Answers

Interview Questions Answers . ORG is an interview preparation guide of thousands of Job Interview Questions And Answers, Job Interviews are always stressful even for job seekers who have gone on countless interviews. The best way to reduce the stress is to be prepared for your job interview. Take the time to review the standard interview questions you will most likely be asked. These interview questions and answers on Oracle PL-SQL will help you strengthen your technical skills, prepare for the interviews and quickly revise the concepts.

If you find any **question or answer** is incorrect or incomplete then you can **submit your question or answer** directly with out any registration or login at our website. You just need to visit [Oracle PL-SQL Interview Questions And Answers](#) to add your answer click on the *Submit Your Answer* links on the website; with each question to post your answer, if you want to ask any question then you will have a link *Submit Your Question*; that's will add your question in Oracle PL-SQL category. To ensure quality, each submission is checked by our team, before it becomes live. This [Oracle PL-SQL Interview preparation PDF](#) was generated at **Wednesday 29th November, 2023**

You can follow us on FaceBook for latest Jobs, Updates and other interviews material.
www.facebook.com/InterviewQuestionsAnswers.Org

Follow us on Twitter for latest Jobs and interview preparation guides.
<https://twitter.com/InterviewQA>

If you need any further assistance or have queries regarding this document or its material or any of other inquiry, please do not hesitate to contact us.

Best Of Luck.

Interview Questions Answers.ORG Team
<https://InterviewQuestionsAnswers.ORG/Support@InterviewQuestionsAnswers.ORG>



Oracle PL-SQL Interview Questions And Answers Guide.

Question - 1:

Give the Types of modules in a form?

Ans:

Form
Menu
Library

[View All Answers](#)

Question - 2:

Name the tables where characteristics of Package, procedure and functions are stored?

Ans:

User_objects, User_Source and User_error.

[View All Answers](#)

Question - 3:

How packaged procedures and functions are called from the following?

- a. Stored procedure or anonymous block
- b. an application program such a PRC *C, PRO* COBOL
- c. SQL *PLUS

Ans:

- a. PACKAGE NAME.PROCEDURE NAME (parameters);
variable := PACKAGE NAME.FUNCTION NAME (arguments);
EXEC SQL EXECUTE
- b.
BEGIN
PACKAGE NAME.PROCEDURE NAME (parameters)
variable := PACKAGE NAME.FUNCTION NAME (arguments);
END;
END EXEC;
- c. EXECUTE PACKAGE NAME.PROCEDURE if the procedures does not have any out/in-out parameters. A function can not be called.

[View All Answers](#)

Question - 4:

What is difference between a Cursor declared in a procedure and Cursor declared in a package specification?

Ans:

A cursor declared in a package specification is global and can be accessed by other procedures or procedures in a package.
A cursor declared in a procedure is local to the procedure that can not be accessed by other procedures.

[View All Answers](#)

Question - 5:

What are two parts of package?

Ans:

The two parts of package are PACKAGE SPECIFICATION & PACKAGE BODY. Package Specification contains declarations that are global to the packages and local to the schema.
Package Body contains actual procedures and local declaration of the procedures and cursor declarations.

[View All Answers](#)

Question - 6:



What is Overloading of procedures?

Ans:

The Same procedure name is repeated with parameters of different datatypes and parameters in different positions, varying number of parameters is called overloading of procedures.

e.g. DBMS_OUTPUT.put_line

What is a package ? What are the advantages of packages ?

[View All Answers](#)

Question - 7:

Explain how procedures and functions are called in a PL/SQL block?

Ans:

Function is called as part of an expression.

sal := calculate_sal ('a822');

procedure is called as a PL/SQL statement

calculate_bonus ('A822');

[View All Answers](#)

Question - 8:

Give the structure of the function?

Ans:

FUNCTION name (argument list) Return datatype is

local variable declarations

Begin

executable statements

Exception

execution handlers

End;

[View All Answers](#)

Question - 9:

Give the structure of the procedure?

Ans:

PROCEDURE name (parameter list.....)

is

local variable declarations

BEGIN

Executable statements.

Exception.

exception handlers

end;

[View All Answers](#)

Question - 10:

What are the two parts of a procedure?

Ans:

Procedure Specification and Procedure Body.

[View All Answers](#)

Question - 11:

What are the modes of parameters that can be passed to a procedure?

Ans:

IN,OUT,IN-OUT parameters.

[View All Answers](#)

Question - 12:

What are advantages of Stored Procedures?

Ans:

Extensibility,Modularity, Reusability, Maintainability and one time compilation.

[View All Answers](#)

Question - 13:

What is difference between a PROCEDURE & FUNCTION?

Ans:

A FUNCTION is always returns a value using the return statement.

A PROCEDURE may return one or more values through parameters or may not return at all.



[View All Answers](#)

Question - 14:

What is PL/SQL table?

Ans:

Objects of type TABLE are called "PL/SQL tables", which are modeled as (but not the same as) database tables, PL/SQL tables use a primary PL/SQL tables can have one column and a primary key.

Cursors

[View All Answers](#)

Question - 15:

What is a cursor ? Why Cursor is required?

Ans:

Cursor is a named private SQL area from where information can be accessed. Cursors are required to process rows individually for queries returning multiple rows.

[View All Answers](#)

Question - 16:

Explain the two type of Cursors?

Ans:

There are two types of cursors, Implicit Cursor and Explicit Cursor.

PL/SQL uses Implicit Cursors for queries. User defined cursors are called Explicit Cursors. They can be declared and used.

[View All Answers](#)

Question - 17:

What are the PL/SQL Statements used in cursor processing?

Ans:

DECLARE CURSOR cursor name, OPEN cursor name, FETCH cursor name INTO or Record types, CLOSE cursor name.

[View All Answers](#)

Question - 18:

What are the cursor attributes used in PL/SQL?

Ans:

%ISOPEN - To check whether cursor is open or not

% ROWCOUNT - Number of rows fetched/updated/deleted.

% FOUND - To check whether cursor has fetched any row. True if rows are fetched.

% NOT FOUND - To check whether cursor has fetched any row. True if no rows are fetched.

These attributes are proceeded with SQL for Implicit Cursors and with Cursor name for Explicit Cursors.

[View All Answers](#)

Question - 19:

What is a cursor for loop?

Ans:

Cursor for loop implicitly declares %ROWTYPE as loop index, opens a cursor, fetches rows of values from active set into fields in the record and closes when all the records have been processed.

eg. FOR emp_rec IN C1 LOOP

salary_total := salary_total + emp_rec sal;

END LOOP;

[View All Answers](#)

Question - 20:

What is an oracle stored procedure?

Ans:

A stored procedure is a sequence of statements that perform specific function.

[View All Answers](#)

Question - 21:

Where the Pre_defined_exceptions are stored?

Ans:

In the standard package.

Procedures, Functions & Packages ;

[View All Answers](#)

Question - 22:



What are the return values of functions SQLCODE and SQLERRM?

Ans:

SQLCODE returns the latest code of the error that has occurred.
SQLERRM returns the relevant error message of the SQLCODE.

[View All Answers](#)

Question - 23:

What is Raise_application_error?

Ans:

Raise_application_error is a procedure of package DBMS_STANDARD which allows to issue an user_defined error messages from stored sub-program or database trigger.

[View All Answers](#)

Question - 24:

What is Pragma EXCEPTION_INIT? Explain the usage?

Ans:

The PRAGMA EXCEPTION_INIT tells the compiler to associate an exception with an oracle error. To get an error message of a specific oracle error.
e.g. PRAGMA EXCEPTION_INIT (exception name, oracle error number)

[View All Answers](#)

Question - 25:

What is an Exception? What are types of Exception?

Ans:

Exception is the error handling part of PL/SQL block. The types are Predefined and user defined. Some of Predefined exceptions are.

CURSOR_ALREADY_OPEN

DUP_VAL_ON_INDEX

NO_DATA_FOUND

TOO_MANY_ROWS

INVALID_CURSOR

INVALID_NUMBER

LOGON_DENIED

NOT_LOGGED_ON

PROGRAM-ERROR

STORAGE_ERROR

TIMEOUT_ON_RESOURCE

VALUE_ERROR

ZERO_DIVIDE

OTHERS.

exception is an identifier and error handling part of pl/sql types := 1) predefined

2) user defined.

[View All Answers](#)

Question - 26:

Write the order of precedence for validation of a column in a table?

I. done using Database triggers.

ii. done using Integrity Constraints

Ans:

I & ii.

Exception :

[View All Answers](#)

Question - 27:

What happens if a procedure that updates a column of table X is called in a database trigger of the same table?

Ans:

Mutation of table occurs.

[View All Answers](#)

Question - 28:

What are two virtual tables available during database trigger execution?

Ans:

The table columns are referred as OLD.column_name and NEW.column_name.

For triggers related to INSERT only NEW.column_name values only available.

For triggers related to UPDATE only OLD.column_name NEW.column_name values only available.

For triggers related to DELETE only OLD.column_name values only available.

[View All Answers](#)

Question - 29:



Is it possible to use Transaction control Statements such a ROLLBACK or COMMIT in Database Trigger? Why?

Ans:

It is not possible. As triggers are defined for each table, if you use COMMIT or ROLLBACK in a trigger, it affects logical transaction processing. yes WE can use COMMIT and ROLLBACK triggers, but by using PRAGMA AUTONOMOUS_TRANSACTION. Now the transaction treated as a autonomous transaction.

[View All Answers](#)

Question - 30:

How many types of database triggers can be specified on a table? What are they?

Ans:

Insert Update Delete
Before Row o.k. o.k. o.k.
After Row o.k. o.k. o.k.
Before Statement o.k. o.k. o.k.
After Statement o.k. o.k. o.k.
If FOR EACH ROW clause is specified, then the trigger for each Row affected by the statement.
If WHEN clause is specified, the trigger fires according to the returned Boolean value.

[View All Answers](#)

Question - 31:

What is a database trigger? Name some usages of database trigger?

Ans:

Database trigger is stored PL/SQL program unit associated with a specific database table. Usages are Audit data modifications, Log events transparently, Enforce complex business rules Derive column values automatically, Implement complex security authorizations. Maintain replicate tables.

[View All Answers](#)

Question - 32:

Explain the usage of WHERE CURRENT OF clause in cursors?

Ans:

WHERE CURRENT OF clause in an UPDATE,DELETE statement refers to the latest row fetched from a cursor. Database Triggers

[View All Answers](#)

Question - 33:

What will happen after commit statement?

Ans:

```
Cursor C1 is
Select empno,
ename from emp;
Begin
open C1; loop
Fetch C1 into
eno,ename;
Exit When
C1 %notfound;----
commit;
end loop;
end;
The cursor having query as SELECT .... FOR UPDATE gets closed after COMMIT/ROLLBACK.
The cursor having query as SELECT.... does not get closed even after COMMIT/ROLLBACK.
```

[View All Answers](#)

Question - 34:

Can we declare a column having number data type and its scale is larger than precision
ex: column_name NUMBER(10,100),
column_name NUMBAER(10,-84)

Ans:

Yes,we can declare a column with above condition.table created successfully.
yes, 100 is the total size and 10 is included in 100

[View All Answers](#)

Question - 35:

What are the Restrictions on Cursor Variables?

Ans:

Currently, cursor variables are subject to the following restrictions:You cannot declare cursor variables in a package spec. For example, the following declaration is not allowed:CREATE PACKAGE emp_stuff AS TYPE EmpCurTyp IS REF CURSOR RETURN emp%ROWTYPE; emp_cv EmpCurTyp; -- not allowedEND emp_stuff;You cannot pass cursor variables to a procedure that is called through a database link.If you pass a host cursor variable to PL/SQL, you cannot fetch from it on the server side unless you also open it there on the same server call.You cannot use comparison operators to test cursor variables for equality, inequality, or nullity.You cannot assign nulls to a cursor variable.Database columns cannot store the values of cursor variables. There is no equivalent type to use in a CREATE



TABLE statement. You cannot store cursor variables in an associative array, nested table, or varray. Cursors and cursor variables are not interoperable; that is, you cannot use one where the other is expected. For example, you cannot reference a cursor variable in a cursor FOR loop

[View All Answers](#)

Question - 36:

What will the Output for this Coding?

```
Declare
Cursor c1 is select * from emp FORUPDATE;
Z c1%rowtype;
Begin
Open C1;
Fetch c1 into Z;
Commit;
Fetch c1 in to Z;
end;
```

Ans:

By declaring this cursor we can update the table emp through z, means we do not need to write table name for updation, it may be only by "z". By issuing the TCL like commit or rollback, the cursor will be closed automatically, you cannot fetch again. You will get an error if you

[View All Answers](#)

Question - 37:

What is the difference between % ROWTYPE and TYPE RECORD?

Ans:

% ROWTYPE is to be used whenever query returns a entire row of a table or view.
TYPE rec RECORD is to be used whenever query returns columns of different table or views and variables.
E.g. TYPE r_emp is RECORD (eno emp.empno% type, ename emp.ename %type);

```
e_rec emp% ROWTYPE
cursor c1 is select empno,deptno from emp;
e_rec c1 %ROWTYPE.
```

One more point : When we have a variable of type RECORD we have to declare additional variables but with %rowtype, we can only have the fields that are present in the table

[View All Answers](#)

Question - 38:

What are % TYPE and % ROWTYPE? What are the advantages of using these over datatypes?

Ans:

% TYPE provides the data type of a variable or a database column to that variable.
% ROWTYPE provides the record type that represents a entire row of a table or view or columns selected in the cursor.
The advantages are :
i. Need not know about variable's data type
ii. If the database definition of a column in a table changes, the data type of a variable changes accordingly.

[View All Answers](#)

Question - 39:

What are the datatypes available in PL/SQL?

Ans:

Some scalar data types such as

```
NUMBER,
VARCHAR2,
DATE,
CHAR,
LONG,
BOOLEAN.
```

Some composite data types such as RECORD & TABLE.

[View All Answers](#)

Question - 40:

What are the components of a PL/SQL block?

Ans:

A set of related declarations and procedural statements is called block.

```
DECLARE -- declaration section BEGIN -- executable statements -- main section EXCEPTION -- handling possible exceptions -- occurring in the main section END;
```

[View All Answers](#)

Question - 41:

What is the basic structure of PL/SQL?

Ans:

PL/SQL uses block structure as its basic structure. Anonymous blocks or nested blocks can be used in PL/SQL.



[View All Answers](#)

Question - 42:

If the application is running very slow? At what points you need to go about the database in order to improve the performance?

Ans:

For improving performance, we need to check the sql statement blocks, because for every sql statement execution transfer to sql engine and come back to plsq engine that process takes more time to process the plsql block.

[View All Answers](#)

Question - 43:

How can a function return more than one value in oracle with proper example?

Ans:

yes we can use objects, arrays to return more than one value

[View All Answers](#)

Question - 44:

How to know the last executed procedure?

Ans:

Execute procedure name (parameter1, parameter2)

Select timestamps, owner, obj_name, action_name from dba_audit_trail; this statement gives last executed time for procedure, function & package.

[View All Answers](#)

Question - 45:

State the difference between implicit and explicit cursors?

Ans:

Implicit Cursor are declared and used by the oracle internally. whereas the explicit cursors are declared and used by the user. more over implicitly cursors are no need to declare oracle creates and process and closes automatically. the explicit cursor should be declared and closed by the user. Implicit cursors are used for single row query whereas explicit cursor is used for multiple row query

[View All Answers](#)

Question - 46:

How to avoid using cursors? What to use instead of cursor and in what cases to do so?

Ans:

Just use subquery in for clause
ex: For emp in (select * from emp)
loop
dbms_output.put_line(emp.empno);
end loop;
no exit statement needed
implicit open, fetch, close occurs

[View All Answers](#)

Question - 47:

How we can create a table in PL/SQL block. insert records into it? is it possible by some procedure or function? please give example?

Ans:

```
CREATE OR REPLACE PROCEDURE ddl_create_proc (p_table_name IN VARCHAR2)
AS
l_stmt VARCHAR2(200);
BEGIN
DBMS_OUTPUT.put_line('STARTING ');
l_stmt := 'create table ' || p_table_name || ' as (select * from emp)';
execute IMMEDIATE l_stmt;
DBMS_OUTPUT.put_line('end ');
EXCEPTION
WHEN OTHERS THEN
DBMS_OUTPUT.put_line('exception ' || SQLERRM || 'message' || sqlcode);
END;
```

[View All Answers](#)

Question - 48:

In a Distributed Database System Can we execute two queries simultaneously? Justify?

Ans:

s Distributed database system based on 2 phase commit, one query is independent of 2nd query so of course we can run.

[View All Answers](#)

**Question - 49:**

what is the starting oracle error number?
what is meant by forward declaration in functions?

Ans:

One must declare an identifier before referencing it. Once it is declared it can be referred even before defining it in the PL/SQL. This rule applies to function and procedures also.

[View All Answers](#)

Question - 50:

Explain rowid, rownum? what are the pseudocolumns we have?

Ans:

ROWID - Hexa decimal number each and every row having unique. Used in searching.
ROWNUM - It is an integer number also unique for sorting. Normally TOP N Analysis.

Other Pseudo Column are

NEXTVAL, CURRVAL Of sequence are some examples

pseudocolumns are default columns provided by Oracle

[View All Answers](#)

Question - 51:

What is the difference b/w stored procedures and application procedures, stored function and application function?

Ans:

Stored procedures are subprogrammes stored in the database and can be called & executed multiple times wherein an application procedure is the one being used for a particular application same is the way for function.

Both can be executed any number of times. Only difference is that stored procedures/ functions are stored in the database in compiled format while the application procedures/functions are not in precompiled format and at run time have to be compiled.

[View All Answers](#)

Oracle Most Popular & Related Interview Guides

- 1 : [Oracle DBA Interview Questions and Answers.](#)
- 2 : [Oracle D2K Interview Questions and Answers.](#)
- 3 : [OCI Interview Questions and Answers.](#)
- 4 : [Forms Reports Interview Questions and Answers.](#)
- 5 : [Oracle RMAN Interview Questions and Answers.](#)
- 6 : [Oracle Scenarios Interview Questions and Answers.](#)
- 7 : [Database Management Interview Questions and Answers.](#)
- 8 : [Oracle AOL Interview Questions and Answers.](#)
- 9 : [Oracle Developer Interview Questions and Answers.](#)
- 10 : [SQL Plus Interview Questions and Answers.](#)

Follow us on FaceBook

www.facebook.com/InterviewQuestionsAnswers.Org

Follow us on Twitter

<https://twitter.com/InterviewQA>

For any inquiry please do not hesitate to contact us.

Interview Questions Answers.ORG Team

[https://InterviewQuestionsAnswers.ORG/
support@InterviewQuestionsAnswers.ORG](https://InterviewQuestionsAnswers.ORG/support@InterviewQuestionsAnswers.ORG)