	Topic 1	
1.	What is difference between Physical and logical data independence?	3
2.	Define the term RDBMS. List out codd's law. Explain any three in detail. (5 times)	7
3.	What is RDBMS? Explain any tow Codd's Rules in detail.	7
	Topic 2	
1.	Define DBA.	2
2.	What is DCL? What is the function of DCL?	2
3.	What is difference between DML and DCL statement?	2
4.	List out DML Statements	2
5.	Write syntax of nested if conditional statement.	2
6.	Explain difference between DML, DDL and DCL statements providing appropriate examples.	7
7.	How RDBMS differs from DBMS?	3
8.	What is DBA? Discuss role of DBA	5
9.	Explain types of SQL statements. Provide appropriate example.	7
10.	Difference between SQL and SQL *PLUS	7
11.	What is PL/SQL? Discuss the advantages of PL/SQL. Compare PL/SQL and SQL.	7
12.	List out any four duties of DBA.	2
13.	Write a detail note on DBA	7
14.	Explain various control statements of PL/SQL. (2 times)	6
	Topic 3.1 Oracle Data types	
1.	Explain BLOB data type.	2
2.	Is it possible to declare an attribute having number data type and its scale is larger than precision? Give appropriate example.	2
3.	Describe the data types and important inbuilt functions of SQL.	7

	Topic 3.2 Oracle DDL & DML **(Create table, Alter Table, Update with multiple column, Updating to null values, Drop Table, Constraints like primary key, foreign key, multicolumn foreign key, foreign key restriction etc)**	
1.	Can we recall deleted records from the oracle 8? Justify your answer.	2
2.	How to disable the primary key constraints from specific table?	2
3.	How can we drop primary key in a table which is created before?	2
4.	How to add new attributes to the table? Is it possible to change the design of table?	2
5.	Is it possible to rename the table? If yes, then how?	2
6.	Explain types of keys.	2
7.	What is difference between unique constraint and primary constraint?	2
8.	What do you mean by "ON DELETE CASCADE" in foreign key?	2
9.	What is DATA CONSTRAINTS? List out all types of constraint. Explain primary key and Foreign Key constraints with ON DELETE CASCADE.	5
10.	Discuss different types of queries. Provide appropriate example.	5
11.	Discuss the Alter command. Is it possible to alter the view? If yes then provide appropriate example.	3
12.	How to copy records or one table to another table? Provide appropriate example.	3
13.	How to create table from already existing table? Give appropriate example	3
14.	What is constraint? Explain various types of constraints	3
15.	Explain table level and column level constraints	3
16.	Explain I/O constraints	5
17.	What is difference between TRUNCATE and DELETE?	2
	Topic 3.3 Operators	
No questions till mar/apr 2013 in above topic		
	Topic 3.4 Oracle Functions	
1.	Give any two conversion functions.	2
2.	Explain any 5 mathematical functions	2
3.	Explain any 5 date functions	6

4.	How to enter a date value using sysdate?	5
5.	What is 'dual' table? Or What is pseudo table? (2times)	2
6.	What is function? Explain any five functions along with syntax and output.	5
7.	Explain different aggregate functions.	7
8.	Oracle functions.	6
Topic 3.5 & 3.6 Range Searching & Pattern Matching		
1.	Give the difference between like and in clause.	2
2.	What are the range searching and pattern matching operators in oracle? Explain with syntax and suitable example.	5
Topic 3.8 Joins		
1.	Explain Equi join with examples	2
2.	What are JOINS? Also explain its types and provide their examples.	7
3.	What is self join? Explain with example.	3
Topic 3.9 Sub Queries		
1.	What is subquery? Explain types of subquery.	5
Topic 3.10 Using Union, Intersect and Minus Clause		
1.	Explain the intersect clause with example.	3
2.	Explain minus and union clause.	2
3.		
Topic 3.11 Index		
1.	What is index? What are types of index?	2
2.	Explain in brief row_id.	3
3.	What database object provides fast access to the data in the rows of a table?	2
4.	What is index? Explain types of index?	5
Topic 3.12 Views		
1.	Is it possible to change the structure of existing view? If yes, then how?	2
2.	Is it possible to create view from another view? If yes, then how?	2
3.	What is updatable view?	2
4.	What is view? Explain restrictions on updateable view.	5
5.	What is view? How to create view?	3
6.	What is difference between table and view?	3
7.	Explain the concept of creating and using views and sequence. Also explain their advantage.	5

8.	What is view? Explain types of view.	5

Topic 3.13 Sequences		
1.	What is CURRVAL pseudo column used for in sequence?	2
2.	What is difference between CYCLE and NO CYCLE option in sequence?(2times)	2
3.	What is a sequence?	2
4.	Which properties of sequence can be modified, if it is possible?	2
5.	What is the use of NEXTVAL?	2
6.	Write syntax to create a sequence and explain the keywords.	3

Grant and Revoke		
1.	Write down command to give SELECT and INSERT privilege to table stud to user SCOTT.	2
2.	Write down the command to take back DELETE and UPDATE privilege to table Emp from user ABC.	2
3.	Write a command to take back select and update privilege from STUD table.	2
4.	What is Granting and Revoking? Write down syntax for GRANT and REVOKE. Also write appropriate command to give permission to user VNSGU2 to update and delete records from item_master table original owner of table item_master is VNSGU1.	5
5.	What is difference between privileges and rights? How privileges and rights are granted to users and revoked to the users? Provide appropriate example and explain.	3
6.	What is difference between Grant and Revoke?	3
7.	Write a command to give insert and modify privileges on emp from user sonali to user aarya.	2

Topic 3.14 Nested tables and Var. arrays		

1.	What is nested table? Explain the following attributes with their return type:
	  a. Exists ()
	  b. Prior( )
	  c. Delete(i,j)
	  d. Last.
		5

2.	What is nested table? How to create nested table	5

Topic 4.1. PL/SQL Block Structure		
1.	Explain the % type data types.	2
2.	What is PL/SQL? Discuss the advantage of PL/SQL in compare to SQL.	5

3.	What is SQL? What is difference between SQL and PL/SQL. Explain data types in PL/SQL.	7
4.	Explain the Iterative control structures in PL/SQL. Provide appropriate examples.	7
5.	Explain the architecture of PL/SQL. Discuss various control structures of PL/SQL.	7
6.	Discuss PL/SQL block structure. Also explain architecture of PL/SQL.	7
7.	Discuss PL/SQL data types.	7
	Topic 4.2 Oracle Transactions	
1.	List out methods to end a transaction in oracle.	2
2.	What is functionality of rollback statement?	2
3.	What is save point? Explain with suitable example	5
4.	What is commit and roll back? How it is possible to rollback the actions?	5
5.	How it is possible to revert the actions using roll-back?	3
6.	What is the use of rollback and recovery manager?	3
	Topic 4.3 Concurrency Control in Oracle	
1.	What is lock? List out level of locks.	2
2.	How to protect all the work and data in an oracle database? Explain the different protective mechanism.	5
3.	What is lock? How implicit locks occur and when?	3
	Topic 4.4 Cursor	
1.	What is Active Data Set?	2
2.	What is a cursor? Give its types.	2
3.	Explain %Rowcount attributes of cursor	2
4.	Define explicit cursor; give its use.	2
5.	Explain FOR cursor loop. Discuss advantages of FOR cursor over simple-cursor. Also give suitable example for Reverse keyword in FOR loop. OR explain cursor for loop. Discuss cursor handling steps.	5
6.	What is cursor? Explain difference explicit and implicit cursors.	7
7.	Discuss cursor attributes. Explain the use of each attributes providing appropriate example.	5
8.	Explain how cursor for loop and cursor for update works?	7
9.	Explain concept, functioning and implementation of cursors. Also discuss types of cursors.	7
10.	Write a note on attributes of cursor.	3
11.	Discuss cursor attributes. Explain the use of each attributes providing appropriate example. (2times)	5

12.	What is cursor? Explain type of cursor.	5
	Topic 4.5 Error Handling in PL/SQL	
1.	What are LOGIN – DENIED and a VALUE – ERROR exception handler?	2
2.	What is the difference between % NOTFOUND and NO_DATA_FOUND?	2
3.	What is difference between exception and error?	2
4.	Explain numbering range default error in oracle.	2
5.	What is Exception? Discuss Named Exceptions in detail.	5
6.	Discuss exception handling concept. Describe types of exception.	7
7.	What is difference between error handling and exception?	3
8.	What is exception? How to create user_defined exceptions? Also explain the process of raising application errors providing appropriate example.	7
9.	What is exception? How exceptions are handled? Explain the difference between use defined and system defined exceptions	5
10.	What is exception? Explain types of exception handling in oracle give one example. Or explain exception handling providing appropriate example.	7
	Topic 5 Stored Procedures & Stored Functions ,package	
1.	How is used defined procedure invoked in a package?	2
2.	What is difference between cursor declared in procedure and package?	2
3.	Name the tables where characteristics of package, procedure and functions are stored.	2
4.	Is it possible to create two procedures having same name? How?	2
5.	What is overloading procedures and functions? Explain restrictions on overloading procedures and functions	5
6.	Define Stored procedure? Where does store procedure reside? State the advantage of store procedure.	5
7.	What is named notation in calling parameter? Discuss the difference between positional and named notation.	5
8.	Discuss PL/SQL support OOP concepts? If yes, then explain how? How to create multiple procedures and functions having same name?	3
9.	What is package? How a package is created? Why package is useful? Also discuss the components of package. (2 times)	7
10.	Explain PL/SQL sub programs. Discuss difference between functions and procedures.	5

11.	Discuss the concept of package. How package provide concept of polymorphism?	5
12.	What is stored procedure and why it is called stored procedure?	7
13.	What is function? Explain any five functions along with syntax and output.	5
14.	What is overloading? Explain function overloading in oracle with proper example. (2times)	7
	Topic 6 Database Triggers	
1.	What is new pseudo row used for in trigger?	2
2.	What is database trigger? Can we invoke trigger explicitly? (2times)	2
3.	How to disable all triggers?	2
4.	What are types of triggers? When mutation errors occur? Provide appropriate example.	5
5.	What is trigger? How trigger executes? How to disable triggers?	5
6	What is the meaning of :new and :old in trigger?	2

	Extra Important Questions	
1.	What are the independent objects of oracle?	2
2.	What is schema?	2
3.	What is syntax for SQL * export?	2
4.	What are the components of physical database structure of Oracle database?	2
5.	What is relationship among database, table space and data file?	2
6.	What is syntax for Sql *loader?	2
7.	What is pseudo table and pseudo column? Give example.	2
8.	Explain the working of SQL *Import and SQl *Export utilities	7
9.	What is subquery? Explain types of subquery.	5
10.	How to protect all work and data in oracle? Explain different protective mechanisms in detail.	7
	Programming Questions Asked in Theory Papers	

1.	Write a SQL to create following tables :
	 STU_MST (rollno, name, ccode, city)
	 FEES_MST (rollno, amt)
	 COURSE_MST (ccode,name)
	 The create table SQL Should have primary key constraints and foreign key constraints. Also write SQL to solve following querries.
	   a. Display the pair of students who are living in the same city.
	   b. Display the students of BCA Course.
	 Find total amount collected as Fees from students.	

2.	Write a trigger that will not allow to change emp table data. After office hour i.e from Monday to Saturday (From 9:00 am to 9:00 pm). There is no restriction on viewing the data.	
3.	Write a PL/SQL code block that will accept an employee no from the user and deduct a salary by Rs. 1000 from input employee no if employee has a minimum salary of Rs. 500 after salary is deducted, otherwise display message "SALARY IS NOT ENOUGH."	

4.	Write an SQL statement to create following tables.
	 Bill_master(bill_no, car_no, chasis_no, cust_code, bill_date, tax, total_cost)
	 Customer_master (cust_code, name, address, purchase_date, car_color)
	 Delivery_master(del_no, bill_no,del_date, del_time)
	   a. Create above tables and write required sql statement providing appropriate constraints.
	   b. Display car sold to the customer in the month of May and June.
	   c. Display bill information, customer name and delivery time for only black and white cars.
	   d. Show name os customers who took delivery of their car in the month of January.
	   e. Display bill information and delivery date for customers whose name starts with 'H'.	

5.	Consider following table. EMPINFO (empno number, name varchar2, age number). Write a trigger, which prohibit delete and update operation to the user. But allow insertion on Friday.	
6.	Write a database trigger, which generate automatic primary key on table Emp (eno (P.K.), name. salary) like E001, E002.	

7.	The product_no stored in product_master table is a concatenation of the month and the number generated by the sequence prod_no for e.g. Product_no 0403 is generated with 04 (month number and 3 is sequence generated value). Insert values in the product_no column of a product_master table using sequence.	
8.	Write a program which will raise custom exception when insertion records in EMP table, if salary is less than 5000 then do not allow insertion and give appropriate message.	
9.	Consider following table : Emp (eno (P.K.), name. salary) Write a procedure to display top 5 highest getting records of Emp along with their name.	

10.	Consider following tables and solve given problems:
	Train(train-no, Train-name)
	Station(Station-code, Station-name)
	Halt(halt-code, seq-no, Train-no, Station-no, Time-in, Time-out)
	
	(halt-code and seq-no are composite key)
	   a. Create above tables. (3)
	   b. Create a procedure which return time-in and time-out for given train-no and station-name. (4)
	                  OR
	   b. Create a function which return name of train which sops at maximum stations.
	   c. Create a trigger which deletes all related records from other tables when any record is deleted from train table.	

11.	Consider following tables:
	   a. Employee (Emp-no, Emp-name, date-of-birth, address, city)
	      Salary (empno, basic, DA,HRA, Tax, Gross, Net) (3)
	   b. Create a procedure which calculate gross and net salary after incrementing basic salary by 3% for given empno
	                  OR
	   b. Create a function which return name of employee who is youngest. (4)
	
	   c. Create a trigger which remove records of those employees who cross their 60 years of age (4)	

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12.	Consider following tables: 　　Distributor (dno, name, phno) 　　Item (ino, name, weight) 　　Dist_item (dno, ino, qty) 　a. Write a function to take distributor name as argument and returns the item name which is sold more. b. Use the same tables and create a procedure which takes as argument dno, ino and returns the total quantity sold by the distributor for the particular item. c. Create a trigger that will not allow the update of salary for employer who is in sales department. 　Emp (eno, name, dno, salary, designation) 　Dept (dno,name,location)	10
13	a. Create a procedure that takes the distributor no and item no from user and display the quantity issued against these values. 　Distributor (dno, dname, addr,phno) 　Item (ino, name, colour,weight) 　Dist_item (dno, ino, qty) b. Write a PL/SQL block that takes input of the account no and display all the transactions of the particular account. c. Create a trigger that will maintain log of transaction on ACT_mast table, when insert, update or delete takes place make entry in log table. 　(ac-no, tdate, tran-type)	10
14	Consider following tabes. 　Distributor (dno, dname, addr,phno) 　Item (ino, name, colour,weight) 　Dist_item (dno, ino, qty) a. Create a procedure which return name of item which is sold maximum. b. Create function which display name of item (return name of item) for given distributor. c. Write PL/SQL block to display distributor name, item name, and qty sold.	10

15.	Consider following tables and solve the following (march/apri 2014) STUDENT(Rollno, Name, Year, Semester, Percentage) TOPPERS (Rollno, Name, Year, Semester) a) Write a procedure, which enters records of all the toppers in Toppers table. Toppers from all semester wise. b) Write a function, which takes input as year along with other necessary parameters and returns total number of students who are fail in specified year. (Consider less than 40% as fail) c) Write a trigger which executes at the time of insert in the student table and checks whether the current student is topper or not and if the current student is topper then delete topper record from topper table and insert current student's record in topper table.	15