

Instruction: All questions carry equal marks.

Duration : 02:30 HRS
Marks: 70**Q-1 Answer the following question**

- A Discuss the advantages of PL/SQL. Explain PL/SQL block structure in detail. 7
- B Write a PL/SQL block that takes user's birth date as an input and displays the age of the user. 7

OR

- A What is cursor? Explain different types of cursors with its attributes and syntax. 7
- B Write a PL/SQL block that takes salary of an employee as an input and displays the total salary. [total salary = salary + HRA(20% of salary) – deduction (2% of salary)] 7

Q-2 Answer the following question

- A What do you mean by sub-program? Explain stored procedure. 7
- B What is trigger? Discuss various types of triggers with suitable examples. 7

OR

- A How Oracle Engine handles an error? Discuss user defined exception handlers with suitable examples. 7
- B What are the advantages of using Oracle package? Explain package creation, invocation and alteration with suitable example. 7

Q-3 Answer the following question.

- A Who is DBA? Explain roles of DBA in detail. 7
- B In context of database, what is privilege? Discuss various types of privilege in detail. 7

OR

- A Write syntax to create a new user and delete an existing user. Also discuss the grant command with suitable example. 7
- B What is role? Explain how to create new role, grant and revoke access rights from the role and view the role of a particular user. 7

Q-4 Answer the following question

- A Write a short note on database failure and recovery along with its importance. 7
- B Discuss various factors causing database failure. 7

OR

- A Discuss the data structure that helps to recover data from the database. 7
- B Discuss any two activities performed by DBA to maintain the database. 7

Q-5 Answer the following question

- A Write a short note on database warehouse architecture. 7
- B Differentiate between DBMS and data warehouse. Also discuss how a data warehouse is designed and constructed. 7

OR

- A What is data mining? Explain its applications. 7
- B Write Note on Data Mart. 7