Exam. Code : 103204
Subject Code : 1090

B.A./B.Sc. 4th Semester

COMPUTER APPLICATION

(Relational Database Management Systems & Oracle)

Time Allowed—Three Hours] [Maximum Marks—75

Note :—(1) Attempt any **FIVE** questions. All questions carry equal marks.

(2) Use of non-programmable and non-storage calculator is allowed.

1. (a) Give some salient features of Oracle along with its advantages and limitations over DBMS. 8

   (b) Define normalization. Why data is normalized ? Explain 2nd and 3rd normal form in this context. 7

2. (a) Explain any two database models of your choice. 8

   (b) Explain Database manager, query processor and other component of RDBMS system. 7

3. (a) Define SQL. Explain various SQL operators in detail with examples. 8

   (b) Explain any three data manipulation commands with suitable examples. 7

4. (a) Why aggregate functions are important ? Explain any three of your choice. 8

   (b) Explain various substitution variables with suitable examples. 7

5. (a) Explain "date and time functions" and "conversion functions" in detail. 8

   (b) Explain "NVC", "Translate" and "Decode" functions. 7

6. (a) Explain some important functions of SQL plus. 8

   (b) How do you define PL/SQL block ? Explain through example. 7

7. (a) What is attribute ? How are they declared ? Explain % type attribute. 8

   (b) What is decision-making ? How is it performed in PL/SQL ? Explain. 7

8. Write briefly about :

   (I) Advantages of PL/SQL 3

   (II) Variable and constant declaration in PL/SQL 3

   (III) Working with columns in SQL plus 3

   (IV) Conversion functions 3

   (V) Data types. 3