B.C.A. (Part–II) Semester–III (Old) Examination

DATABASE MANAGEMENT SYSTEM

Paper–3ST3

Time : Three Hours]　　　　　　　　　　　　　　　　　　　　　[Maximum Marks : 60

Note :— (1)　All questions are compulsory.

(2)　Assume suitable data wherever necessary.

1. (A)　Explain the Architecture for Database System with neat diagram.　6

　　(B)　What is Database Model ? Explain with Network Database Model.　6

OR

2. (A)　What is DBMS ? Give its various advantages and disadvantages.　6

　　(B)　Explain the following with examples :　6

　　　(i)　Referential Integrity

　　　(ii)　Data Integrity

3. (A)　What are Relational Algebra and Relational Calculus ? Explain with one example of each.　6

　　(B)　Explain 1NF, 2NF, 3NF with suitable example.　6

OR

4. (A)　What are Functional Dependencies ? Explain with various types.　6

　　(B)　What is Relational Model ? Explain with the concept of Relation and Keys.　6

5. (A)　Explain Order by and Group by Clauses with proper example.　6

　　(B)　What are the components of SQL ? Explain with proper example.　6

OR

6. (A)　Explain :

　　　(i)　DROP

　　　(ii)　DELETE

　　　(iii)　UPDATE　6

　　(B)　Explain the different Data-types in SQL.　6

7. (A)　Explain the following functions with the help one example of each :　6

　　　(i)　UPPER ( )

　　　(ii)　SUBSTR ( )

　　　(iii)　MIN ( )

　　　(iv)　SUM ( )

　　　(v)　FLOOR ( )

　　　(vi)　LEAST ( )

　　(B)　What is Join ? Explain Equi-Join with suitable example.　6

OR

8. (A) Explain Union and Union-All with suitable example. 6

   (B) Explain any four Numeric Function with suitable exmaple. 6

9. (A) Explain different Data-types used in PL/SQL with suitable example. 6

   (B) What is TRANSACTION ? Explain SET TRANSACTION and COMMIT TRANSACTION. 6

OR

10. (A) What is PL/SQL ? Explain with Control Structure in detail. 6

    (B) Explain Declaring, Opening and Fetching Cursor with suitable example. 6