

AT-437

**B.C.A. (Part-II) Semester—III 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 :
  - (i) Hierarchical database model.
  - (ii) Network database model. 6
- (b) Explain :
  - (i) Entity Integrity
  - (ii) Referential integrity. 6

**OR**

2. (a) What is DBMS ? Explain three levels of data abstraction with neat sketch. 6
- (b) What is DBA ? Explain its role. 6
3. (a) What is normalization ? Explain BCNF. 6
- (b) Explain various keys used in DBMS. 6

**OR**

4. (a) What is functional dependency ? Explain. 6
- (b) What is attribute and domain ? Explain with suitable examples. 6
5. (a) What is DML ? Explain INSERT and DELETE commands. 6
- (b) Explain LIKE and between operators in SQL. 6

**OR**

6. (a) What is view ? Explain. 6  
 (b) Explain :  
 (i) ALTER  
 (ii) DROP  
 (iii) UPDATE. 6
7. (a) Explain DECODE () and SOUNDEX () function with example and syntax. 6  
 (b) Explain :  
 (i) ABS ( )  
 (ii) MOD ( )  
 (iii) SIGN ( )  
 (iv) SIN ( )  
 (v) EXP ( )  
 (vi) LEAST ( ). 6

**OR**

8. (a) Explain :  
 (i) LOWER ( )  
 (ii) INSTR ( )  
 (iii) SUBSTR ( ). 6  
 (b) Explain conversion function with example. 6
9. (a) What is transaction ? Explain save point and Rollback. 6  
 (b) Explain different data types used in PL/SQL with one example of each. 6

**OR**

10. (a) What is cursor ? Explain various attributes of cursor. 6  
 (b) Explain :  
 (i) AUTO COMMIT  
 (ii) COMMIT  
 (iii) SET TRANSACTION.. 6