

This question paper contains 3 printed pages]

Roll No.

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S. No. of Question Paper : 5315

Unique Paper Code : 234251

D

Name of the Paper : Database Management and Systems (DBMS)

Name of the Course : B.A. (Prog.)

Semester : II

Duration : 3 Hours

Maximum Marks : 45

(Write your Roll No. on the top immediately on receipt of this question paper.)

Section A is compulsory.

Attempt any *three* questions from Section B.

Section A

1. (a) Define the following : 2
 - (i) Secondary key
 - (ii) Alternate key.
- (b) Define cardinality. Give a suitable example. 2
- (c) Give full forms of : 2
 - (i) ERD
 - (ii) DML.
- (d) Write any *two* SQL DDL commands. 2
- (e) What are the limitations of database management systems ? 2
- (f) Name any *three* database software. 3
- (g) What are business rules ? 2

P.T.O.

Section B

2. (a) Describe any *three* benefits of DBMS. 6
- (b) A database consists of the following tables : 4
- Student (RollNo, Name, DOB, CNo)
- Course(CNo, CName, Dept)
- Write queries in SQL for the following :
- (i) Display the names and roll number of students born before December 1995.
- (ii) List the names of courses run by English Department.
3. (a) Define the following terms : 4
- (i) Field
- (ii) Record.
- (b) What is the importance of entity integrity and referential integrity in database ? Explain with the help of an example. 6
4. (a) Describe different types of database on the basis of criteria namely number of users, data location, data usage and XML. 4
- (b) Briefly describe any *three* relational operators with example. 6
5. (a) Differentiate between hierarchical and network model. 4
- (b) Briefly describe data dictionary and system catalog with example. 4
- (c) Why is normalization done on data ? 2

6. Draw an ER diagram (using any notation) and state any assumption made for the information given below : 10
- (i) An invoice is written by one sales representative but a sales representative writes many invoices.
 - (ii) A vendor sells many products but a product is bought from one vendor.
 - (iii) An invoice has one or many products and a product is found on zero, one or many invoices.