No. of Printed Pages: 04

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PAPER ID: 27125	Roll No.			

B. B. A./ I. M. B. A. Examination 2021-22 (Even Semester)

DATA BASE MANAGEMENT SYSTEM

Time: Three Hours] [Maximum Marks: 60

Note: Attempt all questions.

SECTION-A

- 1. Attempt all parts of the following:
- $8 \times 1 = 8$
- (a) Define the term data base management system.
- (b) Define a primary key.
- (c) Define the terms DDL and DML.
- (d) Write two primary functions of a DBA.
- (e) What is normalization?
- (f) List different types of file organization system.

- (g) What are the offline storage devices?
- (h) What is a program file?

SECTION-B

- 2. Attempt any two parts of the following: $2 \times 6 = 12$
 - (a) Explain application of data base management system.
 - (b) List various DDL commands. Explain any four with example.
 - (c) Explain 1NF and 2NF with one example of each.
 - (d) List out some security considerations in data base management system.

SECTION-C

- **Note:-** Attempt all questions. Attempt any two parts from each questions. $8 \times 5 = 40$
- 3. (a) What are the different advantages and disadvantages of DBMS?
 - (b) What is meant by data model? Explain hierarchical and relational data model.

- (c) What is a key in DBMS? Explain foreign key and candidate key.
- 4. (a) What is an ER diagram? Explain the various components of an ER diagram.
 - (b) Define the architecture of DBMS. Explain the2-tier and 3-tier architectures in detail.
 - (c) What do you understand by data independence? Define the physical and logical data independence.
- 5. (a) What is file organization in DBMS? Explain sequential and random file organization.
 - (b) Explain in detail the functional dependencies in DBMS?
 - (c) What is data redundancy? How the normalization helps to minimize the redundancy in a DBMS? Explain BCNF with example.
- (a) Explain the various input and output devices of a computer system.

- (b) Explain some business applications of information systems in an organization.
- (c) What do you understand by performance improvement in data base? Explain the steps required to increase the data base performance.
