

This question paper contains **2** printed pages]

**BJ—25—2016**

**FACULTY OF SCIENCE**

**B.Sc. (CS) (First Year) (First Semester) EXAMINATION**

**OCTOBER/NOVEMBER, 2016**

**COMPUTER SCIENCE**

Paper (S1.4)

(Database Management System)

**(Friday, 25-11-2016)**

**Time : 10.00 a.m. to 1.00 p.m.**

*Time—3 Hours*

*Maximum Marks—80*

*N.B. :— All questions are compulsory.*

- |     |   |    |
|-----|---|----|
| 1.  | Attempt the following :                                       | 20 |
| (a) | Define DBMS.  |    |
| (b) | What is DCL ?   |    |
| (c) | Explain the types of relationship.                            |    |
| (d) | Define file.  |    |
| 2.  | (a) Explain the structure of DBMS.                            | 8  |
|     | (b) Explain the users of DBMS.                                | 7  |
|     | <i>Or</i>   |    |
|     | (c) Explain physical and logical files.                       | 8  |
|     | (d) Explain Data models.                                      | 7  |
| 3.  | (a) Explain DML and DDL.                                      | 8  |
|     | (b) Explain advantages and disadvantages of DBMS.             | 7  |
|     | <i>Or</i>   |    |
|     | (c) What are key constraints ? Explain.                       | 8  |
|     | (d) Explain conceptual design for small to large enterprises. | 7  |
| 4.  | (a) Explain E-R model.  | 8  |
|     | (b) Explain Relational algebra.                               | 7  |

P.T.O.

*Or*

- (c) Explain normalization with their types. 8
- (d) Explain the following : 7
  - (i) Insert
  - (ii) Alter
  - (iii) Create
  - (iv) Update.

5. Write short notes on : 15

- (a) File organization
- (b) B+ tree
- (c) Relational operator
- (d) Functional dependancy
- (e) Date function.