# COMPUTER SCIENCE

**(Business Data Processing and Database Management)**

**Time Allowed : Three Hours** **Maximum Marks : 65**

**Note :** Attempt **five** questions in all, including Question No. 9 (which is compulsory) and attempt remaining **four** questions by selecting **one** question from each Section.

## SECTION – A 13 each

1. Differentiate between file oriented approach and database approach highlighting applications of each type.
2. Compare and contrast hierarchical, Network and relational model with suitable example.

## SECTION – B 13 each

3. Explain union, Intersection, Projection and Cartesian product operations of relational algebra with examples.
4. Explain entity integrity and referential integrity constrains. Discuss with suitable examples the significance and usage of Grant and Revoke privileges.

## SECTION – C

13 each

5. Create a table named customer, with the fields Id, Name, City, Address, Phone-number with valid constraints associated with each field. Insert records in the table (multiple records with one command). Write a SQL statement to find all those customers with all information whose names are ending with the letter '*n*'.

6. Explain the following with example :

   (a) Aggregate functions (b) Arithmetic functions

   (c) Data functions