B.A./B.Sc. (General) 4th Semester

(2053)

COMPUTER SCIENCE

Paper : CS07-Data Base Concepts

Time Allowed : Three Hours]   [Maximum Marks : 30

Note :— Attempt *one* question each from Sections A to D. Question No. 9 (Section E) is compulsory. All questions carry equal marks.

SECTION—A

1. What do you mean by DBMS ? Explain the difference between file system and DBMS.   6

2. What is Logical data independence ? Explain the use of logical data independence in detail.   6

SECTION—B

3. What do you mean by ER Model ? Draw an ER model for a college.   6

4. What is integrity constraint ? Explain the difference between entity integrity and referential integrity.   6

SECTION—C

5. What do you understand by domain oriented relational calculus ? Explain the different operations of domain oriented relational calculus. 6

6. What do you mean by Relational algebra ? Describe the different relational algebra queries with examples. 6

SECTION—D

7. Define recovery. Explain the different recovery techniques. 6

8. What do you mean by Normalization ? Discuss the different types of normalization. 6

SECTION—E

(Compulsory Question)

9. Write short notes on the following :—

(a) Concurrency. 2

(b) Union operation of relational algebra. 2

(c) Relational Data Base Management System. 2