BPP–1095(B)

M.Sc. (Previous) Examination, 2022
COMPUTER SCIENCE

(For Due Students)

Paper – MCS–103

(Relational Database Management System)

Time : 3 Hours]　　　　　　　　　　　　　[*Maximum Marks : 100*

Note :–　Attempt *five* questions in all, selecting *one* question from each Unit. All questions carry equal marks.

Unit–I

1. What do you mean by Structure ? Explain different views of Data.　　10+10=20

2. Explain Entities with example. Tell the difference between 3NF and 4NF.　　10+10=20

Unit–II

3. Explain B-Tree File Organization with an example.　　20

4. (a) Explain Insertion and Updation in database with suitable example.　　10

　　(b) Explain Projection and Join Division Operations with example.　　10

BR–790　　　　　　　(1)　　　　　　**BPP–1095(B)**　P.T.O.

Unit–III

5. Write the differences between the DDL and DML. Also explain DCL.   12+8=20

6. What are the different SQL functions ? Explain with example. What do you mean by Constraints ?   8+7+5=20

Unit–IV

7. What are Locks ? Why are they used ? What are their advantages and disadvantages ? Explain with example.   20

8. Explain Error Handling in PL/SQL with suitable example.   20

Unit–V

9. (a) What do you mean by Serializability ?   10

    (b) Explain Atomicity with suitable example.   10

10. (a) What do you mean by Concurrency Control ?   10

    (b) What is recovery ? Explain the various recovery techniques used in RDBMS.   10