III Semester B.C.A. Degree Examination, April/May 2023
(NEP)
COMPUTER APPLICATION
DSC 7 : Database Management System

Time : 2½ Hours

Max. Marks : 60

Instruction : Answer **all** the Sections.

SECTION – A

I. Answer **any six** questions. **Each** question carries **two** marks : (6×2=12)

1) What is DBMS ?

2) Define DBMS interface.

3) Define the terms :
   i) Entity,   ii) Attributes.

4) What is entity sets ?

5) Define foreign key.

6) What is functional dependencies ?

7) What is nested sub queries ?

8) Differentiate between single user and multi user system.

9) Mention the types of database failures.

SECTION – B

II. Answer **any four** questions. **Each** question carries **six** marks : (4×6=24)

10) Write a note on people associated with database system.

11) Explain three schema architecture with neat diagram.

12) Explain various types of relationship.

13) What is PL/SQL ? List the features of PL/SQL.

14) Explain 1NF, 2NF and 3NF with an example.

15) Write a note on transition states.

P.T.O.

SECTION – C

III. Answer **any three** questions. **Each** question carries **eight** marks : (3×8=24)

16) a) Write a note on database system applications. 4

b) What is data independence ? Explain its types. 4

17) What is ER diagram ? Draw a ER diagram for university database. 8

18) Write a note on basic relational algebra operations. 8

19) a) Explain any two aggregate functions with example. 4

b) Write a note on anomalies in relational database design. 4

20) a) Write a note on ACID properties. 4

b) Write a note on time stamp ordering. 4

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