



FOURTH SEMESTER B.SC. (NEP) DEGREE EXAMINATION, AUG./SEPT. 2023

COMPUTER SCIENCE (DSC – 1)

Database Management Systems

Time : 2 Hours]

[Max. Marks : 60

Instruction : Answer **all** questions as per the **internal** choices.

PART – A

I. Answer **any 5** questions. **Each** question carries **2** marks : **(5×2=10)**

- 1) Define database interface. State its types.
- 2) Mention DML and DDL commands.
- 3) Define :
 - a) Strong entity.
 - b) Weak entity.
- 4) What is cardinality ratio ? Mention its types.
- 5) What is an aggregate function ? State its types.
- 6) What is functional dependency ?

PART – B

II. Answer **any 4** questions. **Each** question carries **5** marks : **(4×5=20)**

- 7) What is schema ? Explain three schema architecture.
- 8) What is data independence ? Explain its types.
- 9) Define data model. Explain its types.
- 10) What is key ? Explain different types of keys.
- 11) Explain database design guidelines.

[P.T.O.]

III. Answer any 3 questions. Each question carries 10 marks :

(5+5)

12) Explain the following :

- a) Database interfaces.
- b) People associated with database system.

13) Draw an ER diagram for company database. Explain ER diagram notations.

14) Explain join operations with examples.

15) Explain the following :

- a) Transaction life cycle.
- b) Desirable properties of transactions.

(6+4)