Roll No. Total No. of Pages : 02

Total No. of Questions: 07

BCA (Sem.-4) DATABASE MANAGEMENT SYSTEMS

Subject Code: UGCA1922 M.Code: 79726 Date of Examination: 07-07-22

Time: 3 Hrs. Max. Marks: 60

INSTRUCTIONS TO CANDIDATES:

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

1. Write briefly:

- a) How to sort the data in schema?
- b) What is the role of integrity constraints?
- c) What is the difference between a key and a super key?
- d) What is the difference between specialization and generalization?
- e) Define user defined functions in detail with example in SQL.
- f) Explain the concept recovery.
- g) What is an unsafe query? Give an example.
- h) Under what conditions must a foreign key not be null?
- i) What is log? How it is maintained?
- j) Explain the terms : primary key and candidate key.

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SECTION-B

- 2. What do you understand by Data constraints in SQL? Explain its various types with the help of examples.
- 3. Explain Data modelling in database. Why would you choose a database system instead of simply storing data in operating system files?
- 4. Explain, what is meant by a DDBMS, and discuss the motivation in providing such a system, Discuss the advantages and disadvantages of a DDBMS.
- 5. What is normalization? Compute the closure of the following set F of functional dependencies for relation schema R = (A, B, C, D, E). $A \rightarrow BC$, $CD \rightarrow E$, $B \rightarrow D$, $E \rightarrow A$. List the candidate keys for R.
- 6. Explain 3-level architecture of DBMS. Does the relational model provide physical and logical data independence? Explain.
- 7. Explain various types of JOINs with the help of example. How many rows would a two-table join produce if one table had 50,000 rows and the other had 100,000? What is difference between DELETE & TRUNCATE commands?

NOTE: Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.

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