Roll No. Total No. of Pages: 02

Total No. of Questions: 07

# B.Sc. (IT) (Sem.-2) DATABASE MANAGEMENT SYSTEMS

Subject Code: UGCA-1922 M.Code: 77654

Date of Examination: 08-07-22

Time: 3 Hrs. Max. Marks: 60

# **INSTRUCTIONS TO CANDIDATES:**

- 1. 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. Answer the following:

- a) What are Joins in DBMS?
- b) Describe the use of DDL statements.
- c) What are the advantages of BCNF?
- d) What is the use of Primary and Candidate key in database tables?
- e) What do you mean by serializable schedule?
- f) What is PL/SQL? What it is used for?
- g) What is the significance of Database Administrator?
- h) Differentiate between relational and network data model.
- i) What is the use of stored functions in DBMS?
- j) Describe the uses of DBMS in business.

**1** M-77654 (S3)-721

#### **SECTION-B**

- 2. a) What do you mean by DBMS? Explain the components of Database Management System in detail with the help of a diagram.
  - b) What is the use of Relational data model? How is it different from Entity-Relationship model?
- 3. Describe the following with examples:
  - a) Join and Multi-values dependencies
  - b) DML statements
- 4. What do you mean by Normalization? What is the importance of Normalization in databases? Differentiate between various normal forms with suitable examples.
- 5. a) What are the different aspects of Database Recovery? Why is it needed and how is it implemented?
  - b) What is the role of Database concurrency in DBMS?
- 6. Write brief notes on:
  - a) Three level Architecture of DBMS
  - b) Database Triggers
- 7. What do you mean by Distributed DBMS? Explain its design in detail by giving suitable examples.

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

**2** M-77654 (S3)-721