

BCA-09/DCA-103

June - Examination 2019

BCA Pt. II/DCA Examination**Database Management System****Paper - BCA-09/DCA-103****Time : 3 Hours]****[Max. Marks :- 70**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A**7 × 2 = 14**

(Very Short Answer Questions)

Note: Answer **all** questions. As per the nature of the question delimit your answer in one word, one sentence or maximum up to 30 words. Each question carries 2 marks..

- 1) (i) Differentiate between group by and order by clause in SQL.
- (ii) What is degree of relation?
- (iii) Define composite and multi value attributes in ER diagram.
- (iv) Mention any four main objectives of a database management system.
- (v) Name different sub languages in SQL.
- (vi) What is concurrency control?
- (vii) Name the field that uniquely describes each record?

Section - B**4 × 7 = 28**

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 7 marks.

- 2) Describe the three levels of data abstraction. Why do we need mappings between different levels?
- 3) Give the structure of a DBMS and explain the role of various users in it.
- 4) What is transaction? List the properties of transaction that a database system maintains.
- 5) Differentiate between stored procedure and triggers. How stored procedure and triggers are created? Explain with examples.
- 6) Explain ACID properties. Why they are important in transaction?
- 7) What is data independence? Differentiate between all types of data independence. Explain its use in DBMS.
- 8) Explain various types of joins used in relational database.
- 9) What is normalization? How it is useful in good database design?

Section - C**2 × 14 = 28**

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum up to 500 words. Each question carries 14 marks.

- 10) What do you mean by DBMS? List the differences between a file processing system and DBMS. Write down various goals of a DBMS.
- 11) Explain in details the classification of Data warehouse Design.
- 12) Describe the different types of data models and also explain relational, network and hierarchical data model with suitable example
- 13) Draw an ER diagram for Bus Reservation System consisting of bus_details, bus stands, different fares, reservation, tickets, driver details and passengers. Clearly highlight the primary keys and mapping cardinalities.
