

BCA-09 / DCA-103

June - Examination 2016

BCA Pt. II / DCA Examination**Database Management System****Paper - BCA-09 / DCA-103****Time : 3 Hours]****[Max. Marks :- 100**

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

Section - A**10 × 2 = 20**

(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 upto 30 words. Each question carries 2 marks.

- 1) (i) What is the full form of RDBMS?
- (ii) What do you mean by strong entity?
- (iii) Define schema.
- (iv) What is null attribute?
- (v) Who are end users?
- (vi) Name some popular RDBMS packages.
- (vii) What is the use of check pointing?
- (viii) What is the full form of OLAP?

- (ix) What do you mean by functional dependency?
- (x) What do you mean by degree of a relationship type?
Give example.

Section - B**4 × 10 = 40**

(Short Answer Questions)

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 10 marks.

- 2) Give the definition of serializable schedule. Discuss serializability algorithm with example.
- 3) What are the role of Data Warehouse? Give the difference between Database and Data Warehouse.
- 4) What is key? Discuss the concepts of primary key with example.
- 5) Compare generalization and specialization.
- 6) What do you mean by constraints? Discuss various types of constraints.
- 7) Explain the concept of DDL and DML commands in DBMS.
- 8) Write short note on triggers.
- 9) Why SQL is called non-procedural language? Explain with suitable example.

Section - C**2 × 20 = 40**

(Long Answer Questions)

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.

- 10) What are the requirements of join operation? Discuss various types of join operations with example.
- 11) What is the need of normalization? Explain 1NF, 2NF and 3NF with example.
- 12) Consider the following tables:

Employee (Emp_no, Name, Emp_city)

Company (Emp_no, Company_name, Salary)

Write the following queries in SQL

- (i) Write a query to display employee name, employee city, company name.
 - (ii) Write a query to display emp_name, employee city; company name and salary of the employee whose salary > 10000
 - (iii) Write a query to display all the employees working in 'XYZ' company.
- 13) Explain why we study the data models in database. Also differentiate between E-R model and Relational model.