

B.C.A. (Part-II)

Data. Mana. Sys.

234

B.C.A. (PART -II) EXAMINATION, 2019

(Faculty of Science)

(Three-Year Scheme of 10+2+3 Pattern)

101549

DATABASE MANAGEMENT SYSTEM - 234

Time Allowed : Three Hours

Maximum Marks : 100

No supplementary answer-book will be given to any candidate. Hence the candidates should write the answer precisely in the main answer-book only.

All the parts of one question should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book.

Write your roll number on question paper before start writing answers of questions.

PART-I: *(Very Short Answer) consists of 10 questions of 2 marks each. Maximum limit for each question is upto 40 words.*

PART-II: *(Short answer) consists of 5 questions of 4 marks each. Maximum limit for each question is upto 80 words.*

PART-III: *(Long answer) consists of 5 questions of 12 marks each with internal choice.*

PART - I

1. (a) What do you understand by DBMS?
- (b) What is ER diagram ?
- (c) What is meant by Primary Key ?
- (d) Define Data Modeling.
- (e) Define Normalization.
- (f) What is access control ?
- (g) Explain DML in SQL.
- (h) What is concurrency control ?
- (i) Define nested relation.
- (j) What do you understand by instance ?

PART - II

2. (a) Explain Data Abstractions / Model with diagram.
- (b) Explain Advantages of DBMS over file system.
- (c) Explain 3NF with example.
- (d) Describe types of SQL commands.
- (e) Write a note on object oriented data model.

PART - III

3. (a) Describe the structure of DBMS in detail.
(b) Define Schema.

OR

Write notes on :

- (a) Role of Database Administrator.
(b) Role of File Manager
(c) Physical and logical independence
4. (a) Explain Specialization in ER diagram with diagram.
(b) Explain fundamental operations of Relational Algebra.

OR

Write Short notes on :

- (a) Concept of Super Key
(b) Aggregation
(c) Generalization
5. What is Normalization ? Explain 1NF, 2NF, 3NF with suitable example.

OR

What is Backup and recovery in DBMS ? Explain with suitable examples.

6. What do you understand by view and index in SQL ? Explain each with suitable example.

OR

Write short notes on :

- (a) Minus in SQL
(b) Update and delete operation in SQL
(c) Type of SQL commands
7. (a) Explain Persistent Programming Language.
(b) Explain Distributed query processing.

OR

Write Short notes on :

- (a) Object-Relational database
(b) Object oriented languages
(c) Distributed data storage

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