

This question paper contains 2 printed pages.

B.C.A. (Part - II)

234

Data. Man. Sys.

B.C.A. (PART II) EXAMINATION - 2018
(Faculty of Science)
(Three-year Scheme of 10 + 2 + 3 Pattern)
Paper - 234
(Database Management System)

Time allowed : Three Hours

Maximum Marks : 100

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

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

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

PART - I

1. (a) Give any four drawback of file System.
- (b) What is mean by data independance?
- (c) What is mean by candidate Key?
- (d) Define Schema.
- (e) What is mean by Transactions?
- (f) Define Access control.
- (g) Define views.
- (h) What is mean by Aggregate functions?
- (i) Define concurrency control.
- (j) Give four features of Object Oriented Databases.

[10 x 2 = 20]

PART - II

2. (a) Discuss the architecture of DBMS.
- (b) Write a note on Generalization and aggregation.
- (c) What is mean by boyce codd NF? Explain.
- (d) Write a note on types of SQL commands and SQL operators.
- (e) Write a note on Object-Relational Databases.

[5 x 4 = 20]

PART - III

3. (a) Discuss the advantages and disadvantages of DBMS.
(b) Define Instances. 10+2

OR

Write short notes on-

- (i) Database Administrator
(ii) Data Base System v/s File System 6+6

4. (a) Discuss Entity Relational Model with example.
(b) What is mean by mapping constraints? 9+3

OR

Write short notes on-

- (i) Operations of Relational Algebra
(ii) Keys 6+6

5. (a) Explain 1st, 2nd and 3rd normal forms with example.
(b) What is mean by Backup and Recovery? 8+4

OR

Write short notes on-

- (i) Functional Dependencies
(ii) Transactions & their states.
(iii) Loss Less decomposition 4+4+4

6. (a) Discuss the characteristics and advantages of SQL.
(b) What is mean by minus in SQL? 10+2

OR

Write short notes on-

- (i) SQL Data types
(ii) Aggregate Functions
(iii) Tables and Indexes 4+4+4

7. (a) Discuss Distributed Query Processing.
(b) Explain Object-Oriented Data Model. 6+6

OR

Write short notes on-

- (i) Object-Oriented Databases
(ii) Distributed Transactions
(iii) Persistend Programming Languages 4+4+4