

Roll No.....

J-58-23

Annual Examination, 2023

B.C.A. Part II

B.C.A.-202

Paper II

(Data Management System)

Time : Three Hours]

[MAXIMUM MARKS : 80

Note : Attempt any *two* parts from each unit. All questions carry equal marks.

Unit-I

1. (a) Compare file oriented approach verses database oriented approach.
- (b) Describe Data model in detail.
- (c) Discuss different kinds of DBMS users.

Unit-II

2. (a) Describe ER model with suitable example.
- (b) Explain extended feature of E-R model.
- (c) Write a brief notes on keys.

Unit-III

3. (a) Explain different types of joins with example.
- (b) Discuss Domain relational calculus with example.

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- (c) Describe stand alone and embeded query languages with example.

Unit-IV

4. (a) Define normalization ? Discuss 1NF, 2NF and 3NF with examples.
- (b) Discuss function dependencies with its types in detail.
- (c) Write a brief note on de-normalization.

Unit-V

5. (a) What is view ? How you create and use view ?
- (b) Explain query processing in detail.
- (c) Write the short notes on following :
- (i) Integrity,
 - (ii) Security,
 - (iii) Recovery.

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