

"Do not write anything on question-paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules."

Roll No.

B.C.A. (II)

1720

Data. Sys. Concep.

B.C.A. Part-II EXAMINATION - 2022

Paper - XI

**BCA 205 - DATABASE SYSTEM
CONCEPTS**

Time Allowed : **Three Hours**

Maximum Marks : **80**

Note : 1. Question No. 1 is Compulsory. Attempt any **FOUR** from the remaining questions.

2. All questions carry equal marks.

1. (a) What is data model?
- (b) Differentiate between physical Data Independence and logical Data Independence.
- (c) What is aggregation?

- (d) Differentiate between physical schema and logical schema.
 - (e) What is data redundancy?
 - (f) Define View.
 - (g) Define Kernel.
 - (h) What do you understand by Data abstraction?
2. (a) What do you understand by DBMS? Explain advantages and disadvantages of DBMS.
- (b) Explain duties and responsibilities of DBA.
3. (a) What is ER model? Explain various graphical notations or symbols used in ER diagram.
- (b) Explain various DML and DDL commands in SQL.
4. (a) What do you understand by Cursor? Explain cursor management.
- (b) What do you understand by Joins? Explain all types of joins with appropriate example.
5. Write short notes on the following :
- (a) String oriented functions in SQL
 - (b) Generalization and specializations
 - (c) Mapping constraints
 - (d) Normalization

6. What is PL/SQL? Explain its block diagram. Explain different types of control structures used in PL/SQL.
7. Write short notes on following :
- (a) Sub queries
 - (b) Log writer and redo log files
 - (c) Transaction control commands
 - (d) Mathematical functions in SQL
8. (a) Explain various attributes in DBMS.
- (b) Explain different types of keys used in DBMS.

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