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**COMPUTER SCIENCE PAPER - I : UG-CS - 121**  
**Basics of DBMS**  
**(12245)**

**P. Pages : 2**

**Time : Two Hours**

**Max. Marks : 40**

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**Instructions to Candidates :**

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. All questions are compulsory.
5. Figures to the right indicate full marks.

**1. Attempt any Eight.**

**8**

- a) What is database?
- b) Define Metadata.
- c) What do you mean by data?
- d) What are entities?
- e) Enlist the types of attributes.
- f) What is domain?
- g) What do you mean by data integrity?
- h) Define Candidate Key.
- i) List binary operators in relational algebra.
- j) What is sub query?

2. Attempt any four.

8

a) Define:

- 1) Data Dictionary                      2) Query.

b) What is data definition Language?

c) What are strong and weak entities?

d) What do you mean by referential integrity?

e) List unary operators in relational algebra.

f) Explain how to modify the structure of table.

3. Attempt any two of the following.

8

a) Explain nested queries with example.

b) Explain set difference operation in relational algebra.

c) What are advantages & disadvantages of relational model?

4. a) Attempt any two.

6

i) Explain DML Commands with example.

ii) Write short note on Trigger.

iii) What are Conventions for representing entities & attributes in E-R diagram?

b) Explain how to modify the structure of table.

2

5. Attempt any one.

8

a) Construct E-R diagram for a Car Insurance Company that has set of customers, each one has one or more Cars. Each Car has associated with it zero or any number of recorded accidents.

b) Describe different types of Integrity Constraints.

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