Roll	No.	*******

Total No. of Questions: 07]

[Total No. of Pages: 02

BCA (Sem. - 4th)

DATA BASE MANAGEMENT SYSTEM

SUBJECT CODE : BC - 402 (N2)

<u>Paper ID</u>: [B0216]

[Note: Please fill subject code and paper ID on OMR]

Time: 03 Hours

Maximum Marks: 60

Instruction to Candidates:

- 1) Section A is Compulsory.
- 2) Attempt any Four questions from Section B.

Section - A

Q1)

 $(10 \times 2 = 20)$

- a) What is logical data independence?
- b) What is the difference between data and information?
- c) What is foreign key?
- d) What is the difference between partial participation and total participation?
- e) What are the disadvantages of network model?
- f) What are the advantages of shadow paging recovery technique?
- g) Describe entity integrity constraints.
- h) What is DIVISION operator?
- i) What are accidental security threats?
- j) Describe the function of log file in database.

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P.T.O.

Section - B

 $(4 \times 10 = 40)$

- Q2) What is database administrator? Explain in detail the responsibilities of DBA.
- Q3) What are the functions of DBMS? Explain three level architecture of database.
- Q4) What is conceptual model? Describe sign conventions of E-R model with example.
- Q5) What is relational algebra? Explain different set theoretic operations in algebra.
- **Q6)** What is need of concurrency control? Explain different concurrency control techniques.
- Q7) What are the advantages of distributed systems? Explain their structure.



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