KANDI RAJ COLLEGE BSC SEM V [GEN] TIME -30 minutes (COMPUTER SCIENCE) INTERNAL EXAM [UG-G-DSE-L-501A] ANALYSIS OF ALGORITHMS AND DATA STRUCTURES [DSE-1A] [NEW SYLLABUS]

ANSWER ANY TWO QUESTIONS:

- 1. What is an algorithm? Define Data Structure. Write down the major operations of Data Structure.
- 2. Explain Bubble sort by means of an example. Write down the algorithm of Bubble sort.
- 3. What is Linked List? Write down the algorithm for traversing a linked list.
- 4. Write sort notes on Binary Tree.
- 5. Write down the Procedure for PUSH and POP operations.

KANDI RAJ COLLEGE BSC SEM V [GEN] TIME -30 minutes (COMPUTER SCIENCE) INTERNAL EXAM [UG-G-DSE-L-501A] DATABASE MANAGEMENT SYSTEMS [DSE-1A] [OLD SYLLABUS]

ANSWER ANY TWO QUESTIONS:

- 1. Explain 3-Schema architecture in DBMS with proper diagram.
- 2. Briefly describe E-R Model with an example?
- 3. What do you mean by Data Independence? Explain Logical & Physical Data Independence.

- 4. What is Relational Algebra ? Write short notes on Cartesian Product.
- 5. What is SQL? Write down the characteristics of SQL.
- 6. Write short notes of Functional Dependency.
- 7. What do you mean by Normalization. Explain 1NF,2NFand 3NF in details.

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