GURUDAS COLLEGE
INTERNAL EXAMINATION,2020
SUBJECT - CMSG
Part-II (Genl)
Theory
PAPER – II

F.M=50

Answer Question No. 1 and any 2 from the rest

1. Answer any **four** Questions **: (4X5)**

    a. What are the various operations that can be performed on different data structure? What are the linear and non linear data structures?   2.5+2.5

    b. Write the Dequeue algorithm using array.   5

    c. Write the algorithm for insert at beginning of a singly linked list.   5

    d. Define self loop, isolated vertex in a graph with suitable example.   5

    e. What is DBMS? What is Primary key, candidate key explain with examples.   5

    f. Differentiate between program and software.   5

    g. What is DFD? How it is different from SRS.   2.5+2.5

    h. What is stack? Why it is called LIFO structure.   2.5+2.5

2. What are the various differences between array and linked list? Write an algorithm for push and pop operation of a stack.   5+5+5

3. Write the algorithm for Bubble sort. Covert the following infix expression into postfix using stack.

                        (A+B)*C/D   8+7

4. Define DDL. State any one DDL command in SQL. Why SQL is called functionally completed?
                                      3+4+5

5. Define Data integrity. Explain with an example. Differentiate between entity and schema. Distinguish strong and weak entity set with examples.   2+2+5+6

6. Write short note (any 3)   3X5
        a. File organization
        b. Role of DBA
        c. Aggregate functions on SQL
        d. 3 NF

7. Name different phases of the waterfall model. State their function briefly. What are the advantages and disadvantages of Water fall Model?   5+5+5

8. What do you understand by Software Development Life cycle? Explain the phases Spiral model with a diagram.   5+10

9. State differences between connected and unconnected Graph with examples and diagram. What are the characteristics of level-0 DFD? State the characteristic of a good SRS document.   8+3+4

Send the Scanned answer scripts to the following mail id:
csexam.cmsg3@gmail.com