Oct-2014

कुमकुम - 011

0451

COMPUTER SCIENCE PAPER - I : CS-231
Data Structure - I
(New) (23245)

P. Pages : 2

Time : Two Hours **Max. Marks : 40**

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same 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 priority queue ?

b) Enlist operations perform on files.

c) Define the term array.

d) What is Deque ?

e) What is overflow area ?

f) Define relative file.

g) Why stack is called LIFO data structure ?

h) Define circular linked list.

i) What is time complexity of an algorithm ?

j) What do you mean by functions in data structure ?

2. Attempt **any four.** **8**

a) Enlist an applications of queues.

b) Differentiate between sequential & Direct file.

c) Explain an importance of file organisation.

d) What is multiple queues ?

e) Explain any one application of stack.

f) Define primitive & non primitive data structure.

3. Attempt **any two.** 8

a) Explain space analysis of an algorithm.

b) Convert the following infix expression into postfix expression (5+2)*3.

c) Write an algorithm to pop an element into a stack.

4. a) Attempt **any two.** 6

a) How arrays are different from linked list ?

b) Explain doubly linked list.

c) What is an algorithm ? Explain format conventions of algorithmic notations.

b) What is index sequential file ? 2

5. Attempt **any one.** 8

a) Write an algorithm to insert an element in circular queue.

b) Enlist & explain applications of linked list.

****