Roll No. Total No. of Pages : 02

Total No. of Questions : 16

B.Sc. (IT/Graphics & Web Designing)/BCA (Sem.–3)

DATA STRUCTURES

Subject Code : UGCA-1915

M.Code : 78181

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.

SECTION-A

Write briefly :

1) Garbage collection

2) Linked List

3) Small 'o' Notation

4) Define Queue

5) Polish Notation

6) Define Heap

7) In-degree

8) AVL Tree

9) Searching

10) Binary Tree

SECTION-B

11) Give an example of postfix expression. How to evaluate it using stacks?

12) Differentiate between arrays and linked list.

13) Explain the working of quick sort with example.

14) Define hashing and hash table. Also explain the concept of collision and its resolution.

15) Write a note on AVL tree and B-Trees.

16) Write algorihtms for creating a stack using linked list. How to add and delete a note from stack?

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.