April 2015

खडक - 001

Seat Number

* 0 0 0 7 *

COMPUTER SCIENCE PAPER – I (NEW) : CS - 241

Data Structure - II

(24245)

P. Pages : 2

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

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Graph or diagram should be drawn with the black ink 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 hashing ?

b) What is Root Node ?

c) Enlist graph traversal methods.

d) What is sorting ?

e) What is degree of a tree ?

f) What is searching ?

g) Enlist hashing functions.

h) What is forest ?

i) What is DFS ?

j) What is necessary condition for binary search ?

2. Attempt **any four.** 8

a) What is sequential search ?

b) What is strictly binary search tree ?

c) List various sorting techniques.

d) Differentiate between tree and linked list.

e) What is bubble sort ?

f) What is use of mid square method ?

3. Attempt **any two.** 8

a) What is selection sort ? Explain with suitable example.

b) Explain any one technique of collision resolution.

c) What is directed and indirected graph ? Explain.

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

i) What is AVL tree ?

ii) Write an algorithm for merge sort.

iii) Explain Binary search technique in brief.

b) What is tree traversing ? 2

5. Attempt **any one.** 8

a) What is binary tree ? Explain in detail storage representation of binary tree and operations on binary tree.

b) What is graph ? Explain in brief representation of graph and application of graph.

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