Roll No. .....

976

BCA 3rd Sem er (New)
Examination– D mber, 2013

DATA STR RE-I

Paper B( )2

Time : 3 hours ***Max. Marks : 80***

Before answering the stions, candidates should ensure that they been supplied the correct and complete stion paper. No complaint in this regard e entertained after the examination.

Note : Question No. 1 i npulsory. Attempt **four** more que s, selecting one question from eac t.

1. Answer the following ions briefly :

(f) Explain ortance of Head node in linked li

(g) What is inear data structure ?

(h) Explain stack operations.

$8 \times 2 = 16$

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2. (a) What is em matching ? How is it useful a ed ? Discuss its algorithms with exa . 10

(b) Discuss space tradeoff of complexity of an alg n with examples. 6

3. Explain the wing briefly with suitable examples :

(i) Data Str es and their applications 8

(ii) Big-O nc and its uses. 8

(b) Define circula bly linked list. How is it represented nemory ? Discuss its applications w xamples. 10

5. Describe the follo with examples :

(i) Multidimensic array and its advantages. 8

(ii) Threaded lists their applications. 8

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6. (a) What is circul eue ? What operations are applied ? Explain its linked representatio examples. 8

(b) Define stack scribe its two major applications xamples. 8

7. Explain the follo with examples.

(i) Recursion an dvantages. 8

(ii) Linked repres ion of linear queue.

(b) What is graph xplain its applications in Computer S :e with examples. 8

9. Explain the follow riefly with examples :

(i) Tree traversal ithms 8

(ii) Types of repre tion of graphs 8

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