[Total No. of CO's : 4] Seat No: [Total No. of Pages: 1]

G. H. Raisoni College of Engineering and Management, Pune.
(An Autonomous Institution affiliated to Savitribai Phule ,Pune University)
S.Y B. Tech (E&TC/IT) (Term-III)
ESE Winter-2020 (2019Pattern)
Data Structures (BITL19202)

[Time:-- 1 ½ Hours] [Max. Marks:30]

COURSE OUTCOME:

1. To describe the usage of various data structure
2. To analyze, evaluate and choose appropriate abstract data types and algorithms to solve particular problems.
3. To Compare and contrast the benefits of dynamic and static data structures implementation.
4. To design and implement the learned data structure algorithm for problem solving.

Instructions to the candidates:

1) *(CO1/CO2/CO….)at the beginning of question/sub question indicates the course outcome related to the question.*
2) *All questions compulsory.*
3) *Neat diagrams must be drawn wherever necessary.*
4) *Figures to the right indicate full marks.*
5) *Assume suitable data, if necessary.*
6) *Other Instructions, if any.*

CO	Sub Question		Marks
CO1	a)	Describe with suitable example function with call by reference.	[3]
	b)	Illustrate with suitable example queue and its operations.	[3]
		OR	
	c)	Explain the methods used for avoiding collision in linear hashing.	[3]
CO2	a)	Evaluate the given prefix expression (- + * 5 6 2 / 6 4) by choosing appropriate data structure.	[4]
	b)	Choose appropriate data structure to build balanced binary search for the data - 15, 20, 24, 10, 13, 7, 30, 36, 25	[4]
CO3	a)	Compare and contrast structure and union with syntax.	[4]
	b)	Distinguish between hashing with linear and binary search methods.	[4]
CO4	a)	Write a function to insert data at the end of doubly linked list.	[4]
	b)	Write a C code to create a file called student database consisting of RNO, Name and Class and display the contents from the file on to display device.	[4]

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