(10 Marks)

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice. Important Note: 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.

Sixth Semester B.E. Degree Examination, Aug./Sept.2020 **Advanced Computer Programming**

Max. Marks:100 Time: 3 hrs.

Not	e: <i>A</i>	nswer any FIVE full questions, selecting at least TWO full questions from	each part.
		$\underline{PART - A}$	
1	a.	What is debugging and give proper suggestions for debugging.	(06 Marks)
	b.	Explain friends and protected class members.	(06 Marks)
	C.	Explain the dynamic memory allocation, with the help of a program.	(08 Marks)
		E 1 : (1 - 1 to the late two armore and ownlein row major and column major m	annings
2	a.	Explain the abstract data type array and explain row major and column major m	(10 Marks)
	h	Define indexing. Explain indexing of a two dimensional array.	(06 Marks)
	b.	Explain the following:	(0011200200)
	C.	*	
		i) Tridiagonal	(04 Marks)
		ii) Upper triangular matrices	(0.1.101113)
3	a.	Explain the abstract data type stack.	(05 Marks)
	b.	Explain inheritance as applied to stacks.	(05 Marks)
	c.	Explain parenthesis matching using stack, with a program.	(10 Marks)
	C.	Explain parenties in nate in grant g	
4	a.	Define Queue and abstract datatype of Queue.	(08 Marks)
4	a. b.	What are the two methods of representing a queue? Explain linked Representati	
	υ.	What are the two methods of representing a queue. Employment	(04 Marks)
	C.	Write a program to demonstrate the execution of a Queue.	(08 Marks)
		Time a program of	
		PART - B	
5	a.	Define Dictionary with its operation.	(06 Marks)
	b.	Explain skip list Representation.	(04 Marks)
	c.	Write program for hash table definition and construction.	(10 Marks)
6	a.	Define tree. Explain elements of tree.	(04 Marks)
	b.	Explain properties of Binary tree.	(06 Marks)
	C.	Construct binary expression trees corresponding to following expressions:	
		i) $(a * b) + (c / d)$	
		ii) $((a+b)+c)+d$	
		iii) $((-a) + (x+y)) / ((+b) * (c * a))$	(10 Marks)
7	a.	Write note on linear list in apriority queue.	(10 Marks)
	b.		(10 Marks)
		· · · · · · · · · · · · · · · · · · ·	
8	a.	Explain indexed binary search trees.	(10 Marks)
	1	TYY :	(10 Marks)

Write a program for simple histrogramming.