Introduction to C++ for DSA

Module 4: Mid Term Exam

Deadline 100 marks: 26th May 11.59 PM.
Deadline 90 marks: 27th May 11.59 PM.
Deadline 80 marks: Anytime after that.

Answer sheet: 📄 Answer Script

Question No		Question	Marks
1	**a**	Explain Stack and Heap memory.	**5**
	b	Why do we need dynamic memory allocation? Explain with examples.	**5+5**
	c	How to create a dynamic array? What are the benefits of it?	**5+10**
2	**a**	How does class and object work? How to declare an object?	**5+5**
	b	What is a constructor and why do we need this? How to create a constructor show with an example.	**10+5**
	c	Create a class named **Person** where the class will have properties name(string), height(float) and age(int). Make a constructor and create a dynamic object of that class and finally pass proper values using the constructor.	**15**
3	**a**	What is the size that an object allocates to the memory?	**5**
	b	Can you return a static object from a function? If yes, show with an example.	**10**
	c	Why do we need -> (arrow sign)?	**5**
	d	Create two objects of the **Person** class from question **2-c** and initialize them with proper value. Now compare whose age is greater, and print his/her name.	**10**