

B V RAJU INSTITUTE OF TECHNOLOGY**(UGC AUTONOMOUS)**

B.Tech 2 Year 1 Semester Regular/Supplementary Examinations, Feb 2021

ADVANCED DATA STRUCTURES THROUGH C++

ACADEMIC

Time: 3 Hours**Max Marks: 70**

Note: This Question Papers Contains Two Parts A and B

Part A: is compulsory Which Carries 20marks. Answer all Questions in Part A at one place only.

Part B consists of 10 Questions. Answer any five (one full question from each unit). Each question carries 10 marks and may have a, b, c as sub questions.

Part - A

(2 x 10 = 20)

1. a) What is an inline function?
- b) Explain the purpose of the keyword volatile.
- c) Distinguish between shallow copy and deep copy.
- d) What is the role of mutable storage class specifier?
- e) What is the data type to store the Boolean value?
- f) What is a destructor? Can it be overloaded?
- g) Can I use 'delete' operator to release the memory which was allocated using malloc() function of C language?
- h) What is a friend function?
- i) What is a namespace?
- j) What is a class template?

Part - B

(5 x 10 = 50)

- 2 a) Comment on Local and Global scope of a variable.
- b) Comment on Assignment Operator in C++.

OR

- 3 a) How many ways are there to initialize an int with a Constant?
- b) How do you define/declare constants in C++?

4 a) What is an Inline function in C++?

b) What are the various Compound Assignment Operators in C++?

OR

5 a) Explain Pass by Value and Pass by Reference.

b) What do you mean by 'void' return type?

6 a) What is the keyword auto for?

b) What is the purpose of the Extern Storage Specifier?

OR

7 a) What is a Reference Variable in C++?

b) What's the order in which the objects in an array are destructed?

8 What is the difference between finally and finalize block?

OR

9 What is StreamReader/StreamWriter class?

10 What are Regular expressions? Search a string using regular expressions?

OR

11 How to use Delegates with Events?
