

**R18**

Code No: 153BK

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year I Semester Examinations, October - 2020

OBJECT ORIENTED PROGRAMMING USING C++

(Common to CSE, IT)

Time: 2 hours

Max. Marks: 75

Answer any five questions  
All questions carry equal marks

- 1.a) How to create a class? How to create an object? Explain with an example.  
b) How data and functions are organized in Object Oriented Program? Explain with an example. [7+8]
- 2.a) How member function is defined inside a class and outside the class? Explain with an example each.  
b) In which order the constructors and destructors are executed? Explain with an example. [8+7]
- 3.a) Write a C++ program to implement single inheritance with public access specific.  
b) What are pure virtual functions? How are they different from normal functions? [6+9]
- 4.a) Write the difference between the:  
i) get() function and the getline() function  
ii) write () and read() function.  
b) Write a statement that will read the contents of an ifstream object called ifile into an array called buff. Define what "current position" means when applied to files? [9+6]
- 5.a) Write a C++ program to demonstrate the concept of rethrowing an exception.  
b) Explain the use of try, catch and throw for exception handling in C++. [8+7]
- 6.a) How a pointer is declared and initialized? Give an overview of pointer arithmetic.  
b) Differentiate between new and delete operators in C++ with suitable examples. [8+7]
- 7.a) Define parameterized constructors. How to write them? Give an example.  
b) Describe the process of dynamically creating and destructing the objects. [8+7]
- 8.a) What is virtual inheritance? Give an example in C++ to illustrate the use of it.  
b) Write a program in C++ that prints the factorial of a given number using dynamic binding. [7+8]

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