Jagannath International Management School

VasantKunj, New Delhi – 110070
(Affiliated to Guru Gobind Singh Indraprastha University, New Delhi)
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Participant of UNGC & UNPRME, New York
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Bachelor of Computer Applications (BCA)

Course : BCA **Semester : III**
Subject Code: 20253 **Subject : C++ Lab**

S. No.	Question
1.	To study the basics of programming a. Program to swap two numbers. b. Program to print factorial of a number. c. Program to print prime numbers. d. Program to print the ASCII value of the number. e. Program to reverse the content of array. f. wAp using function
2.	Program to understand the concept of Classes and objects.
3.	Create a 'DISTANCE' class with: - feet and inches as data members - member function to input distance - member function to output distance - member function to add two distance objects Write a main function to create objects of DISTANCE class. Input two distances and output the sum.
4.	Create a class called 'EMPLOYEE' that has a. EMPCODE and EMPNAME as data members b. Member function getData( ) to input data c. Member function display( ) to input data Write a main function to create EMP, an array of EMPLOYEE objects that accepts and display the details of employee.
5.	Program to demonstrate the concept of Static variables.
6.	Program to make the percentage calculator and assign the grades according to the percentage obtained.
7.	Program to demonstrate call by value and call by reference method to print Fibonacci series using functions
8.	
9.	Program to pass objects as function arguments By value and By reference.
10.	WAP to demonstrate the use of friend function.
11.	Create a class 'COMPLEX' to hold a complex number. Write a friend function to add two complex numbers. Write a main function to add two COMPLEX objects.
12.	WAP to implement overloading of Unary operator using friend function & member function.

S. No.	Question
13.	WAP to implement overloading of Binary operator using friend function & member function.
14.	Program to check demonstrate function overloading, to check whether the given number and string is palindrome or not.
15.	Write a C++ program to implement function overloading in order to compute power(m,n) where i) m is double and n is int ii) m and n are int.
16.	WAP to find the largest of three numbers using inline function.
17.	Create a class called 'TIME' that has - three integer data members for hours, minutes and seconds - constructor to initialize the object to zero - constructor to initialize the object to some constant value - member function to add two TIME objects - member function to display time in HH:MM:SS format Write a main function to create two TIME objects, add them and display the result in HH:MM:SS format.
18.	WAP to implement constructors and destructors in C++.
19.	WAP to demonstrate the use of this pointer.
20.	WAP to find whether the roots of a quadratic equation are real or not.
21.	WAP to show the concept of virtual function and pure virtual function.
22.	WAP to implement single inheritance.
23.	WAP to implement multiple inheritance.
24.	WAP to implement multilevel inheritance.
25.	WAP to implement hierarchical inheritance.
26.	WAP to implement hybrid inheritance.
27.	WAP to implement unary operator overloading.
28.	WAP to implement binary operator overloading.
29.	WAP to implement nested class in C++.
30.	WAP to demonstrate the use of virtual function.
31.	WAP to swap two numbers using function templates.
32.	WAP to demonstrate the concept of template overloading.
33.	To implement file handling concept using sequential access.
34.	To implement file handling concept using random access.
35.	WAP to demonstrate exception handling in C++.