Sr No	Title	Date	Page No.	Marks	Sign
1.	Basics of programming				
2.	2.1 Write a program to calculate the area of circle, rectangle and square using function overloading. 2.2 Write a program to demonstrate the use of default arguments in function overloading. 2.3 Write a program to demonstrate the use of returning a reference variable.				
3.	3.1 Create a class student which stores the detail about roll no, name, marks of 5 subjects, i.e. science, Mathematics, English, C++. The class must have the following:• Get function to accept value of the data members.• Display function to display values of data members.• Total function to add marks of all 5 subjects and store it in the data members named total. 3.2 Create a function power() to raise a number m to power n. the function takes a double value for m and int value for n, and returns the result correctly. Use the default value of 2 for n to make the function calculate squares when this argument is omitted. Write a main that gets the values of m and n from the user to test the function. 3.3 Write a basic program which shows the use of scope resolution operator. 3.4 Write a C++ program to swap the value of private data members from 2 different classes.				
4.	4.1 Write a program to illustrate the use of this pointer. 4.2 An election is contested by five candidates. The candidates are numbered 1 to 5 and the voting is done by marking the candidate number on the ballot paper. Write a program to read the ballots and count the votes cast for each candidate using an array variable count. In case a number is read outside the range of 1 to 5, the ballot should be considered as a 'spoilt ballot' and the program should also count the number of spoilt ballots.				

	4.3 Write a program to call member functions of class in the main function using pointer to object and pointer to member function.				
5.	**5.1 Using friend function find the maximum number from given two numbers from two different classes. Write all necessary functions and constructors for the program.** **5.2 Using a friend function, find the average of three numbers fromthree different classes. Write all necessary member functions and constructor for the classes.** **5.3 Define currency class which contains rupees and paisa as data members. Write a friend function named AddCurrency ( ) which add 2 different Currency objects and returns a Currency object. Write parameterized constructor to initialize the values and use appropriate functions to get the details from the user and display it.** **5.4 Create Calendar class with day, month and year as data members. Include default and parameterized constructors to initialize a Calendar object with a valid date value. Define a function AddDays to add days to the Calendar object. Define a display function to show data in "dd/mm/yyyy" format.**				
6.	**6.1 Create a class named 'String' with one data member of type char *, which stores a string. Include default, parameterized and copy constructor to initialize the data member. Write a program to test this class** **6.2 Write a base class named Employee and derive classes Male employee and Female Employee from it. Every employee has an id, name and a scale of salary. Make a function ComputePay (in hours) to compute the weekly payment of every employee. A male employee is paid on the number of days and hours he works. The female employee gets paid the wages for 40 hours a week, no matter what the actual hours are. Test this program to calculate the pay of employee.** **6.3 Create a class called scheme with scheme_id, scheme_name, outgoing_rate, and message charge. Derive customer class form scheme and include**				

	cust_id, name and mobile_no data.Define necessary functions to read and display data. Create a menu driven program to read call and message information for a customer and display the detail bill.				
7.	**7.1 Write a program with use of inheritance: Define a class publisher that stores the name of the title. Derive twoclasses book and tape, which inherit publisher. Book class contains member data called page no and tape class contain time for playing. Define functions in the appropriate classes to get and print the details.** **7.2 Create a class account that stores customer name, account no, types of account. From this derive classes cur_acc and sav_acc to include necessary member function to do the following:• Accepts deposit fromcustomer and update balance• Compute and Deposit interest• Permit withdrawal and Update balance.** **7.3 Write a base class named Employee and derive classes Male employee and Female Employee from it. Every employee has an id, name and a scale of salary. Make a function ComputePay (in hours) to compute the weekly payment of every employee. A male employee is paid on the number of days and hours he works. The female employee**				
9.	**9.1 Create a class MARIX of size mxn. Overload + and –operators for addition and subtraction of the MATRIX.** **9.2 Define a class Coord, which has x and y coordinates as its data members. Overload ++and – operators for the Coord class. Create both its prefix and postfix forms.** **9.3 Create one class called Rupees, which has one member data to store amount in rupee and create another class called Paise which has member data to store amount in paise. Write a program to convert one amount to another amount with use of type conversion** **9.4 Create two classes Celsius and Fahrenheit to store temperature in terms of Celsius and Fahrenheit respectively. Include necessary functions to read and**				

	display the values. Define conversion mechanismto convert Celsius object to Fahrenheit object and vice versa. Show both types of conversions in main function.				