1. Write a C++ program to check maximum and minimum of two integer numbers. (Use Inline function and Conditional operator).
2. Write a C++ program to find volume of cylinder, cone and sphere. (Use function overloading).
3. Write a C++ program to accept Worker information Worker_Name, No_of_ Hours_worked, Pay_Rate and Salary. Write necessary functions to calculate and display the salary of Worker. (Use default value for Pay Rate).
4. Write a C++ program to create a base class Employee (Emp-code, name, salary). Derive two classes as Fulltime (daily wages, number_of_days) and Parttime (number_of_working hours, hourly wages) Write a menu driven program to perform following functions: i.Accept the details of 'n' employees and calculate the salary. ii.Display the details of 'n' employees. iii.Display the details of employee having maximum salary for both types of employees.
5. Write a C++ program to create two Classes Square and Rectangle. Compare area of both the shapes using friend function. Accept appropriate data members for both the classes.
6. Create a C++ class Cuboid with data members length, breadth, and height. Write necessary member functions for the following i. void setvalues(float float,float) to set values of data members. ii. void getvalues() to display values of data members. iii. float volume() to calculate and return the volume of cuboid. iv. float surface area() to calculate and return the surface area of cuboid. (Use Inline function).
7. Write a C++ program to create a class Date with data members day, month, and year. Usedefault and parameterized constructor to initialize date and display date in dd-Mon-yyyy format. (Example: Input 04-01-2021 Output: 04-Jan-2021).
8. Create a C++ class Cuboid with data members length, breadth, and height. Write necessary member functions for the following float surface area() to calculate and return the surface area of cuboid.
9. Write a c++ program to accept radius of a Circle. Calculate and display diameter,circumference as well as area of a Circle. (Use Inline function).
10. .Write a C++ class Seller (S Name, Product_name, Sales Quantity, Target Quantity, Month. Commission). Each salesman deals with a separate product and is assigned a target for a month. At the end of the month his monthly sales is compared with target and commission iscalculated as follows: If Sales Quantity>Target Quantity then commission is 25% of extra sales made+ 10% of target. If Sales Quantity Target Quantity then commission is 10% of target. Otherwise commission is zero. Display salesman information along with commission obtained. (Use array of objects).
11. Create a C ++ class Fraction with data members Numerator and Denominator. Write a C+ program to calculate and display sum of two fractions. (Use Constructor).
12. Design two base classes Student (S_id. Name, Class) and Competition (C_id, C_Name). Derive a class Stud Comp(Rank) from it. Write a menu driven program to perform following functions i. Accept information. ii. Display information. iii. Display Student Details in the ascending order of Rank of a specified competition. (Use array of objects).
13. Write a C++ program to create two Classes Square and Rectangle. Compare area of both the shapes using friend function. Accept appropriate data members for both the classes.

14. Design a base class Product (Product_Id, Product_Name, Price). Derive a class Discount (Discount_In_Percentage) from Product. A customer buys ‘n’ products. Write a C++ program to calculate total price, total discount.
15. Write a C++ program to create a class E Bill with data members Cust_Name, Meter_ID, No_of_Units and Total Charges. Write member functions to accept and display customer information by calculating charges. (Rules to calculate electricity board charges) For first 100 units Rs. 1 per unit• For next 200 units: Rs. 2 per unit• Beyond 300 units : Rs. 5 per unit• All users are charged a minimum of Rs.150. If the total charge is more than Rs.250.00 then an additional charge of 15% is added.
16. Create a C++ class Visiting Staff with data members Name. No of Subjects. Name of Subjects[]. Working hours, Total_Salary. (Number of subjects varies for a Staff). Write a parameterized constructor to initialize the data members and create an array for Name_of_Subjects dynamically. Display Visiting Staff details by calculating salary. (Assume remuneration Rs. 300 per working hour.
17. Create a C ++ class Fraction with data members Numerator and Denominator. Write a C+ program to calculate and display sum of two fractions. (Use Constructor).
18. Design two base classes Student (S_id. Name, Class) and Competition (C_id, C_Name). Derive a class Stud Comp(Rank) from it. Write a menu driven program to perform following functions i. Accept information. ii. Display information. (Use array of objects).
19. Write a C++ program to accept Worker information Worker_Name, No_of_ Hours_worked, Pay_Rate and Salary. Write necessary functions to calculate and display the salary of Worker. (Use default value for Pay Rate).
20. Write a C++ program to create a base class Employee (Emp-code, name, salary). Derive two classes as Fulltime (daily wages, number_of_days) and Parttime (number_of_working hours,hourly wages) Write a menu driven program to perform following functions: i.Accept the details of 'n' employees and calculate the salary. ii.Display the details of 'n' employees.