Second Assignment of ESFP-II

1) Write a function called reversit() that reverses a C-string (an array of char). Use a for loop that swaps the first and last characters, then the second and next-to-last characters, and so on. The string should be passed to reversit() as an argument.

2) Answer the questions (i) to (iv) based on the following code :

```cpp
class Drug
{
    char category[10];
    char date_of_manufacture[10];
    char company[20];
  public:
    Drug();
    void enterdrugdetails();
    void showdrugdetails();
};

class Tablet : public Drug
{
  protected:
    char tablet_name[30];
    char volume_label[20];
  public:
    float price;
    Tablet();
    void entertabletdetails();
    void showtabletdetails ();
};

class PainReliever : public Tablet
{
    int dosage_units;
    char side_effects[20];
    int use_within_days;
```

```
  public:
    PainReliever();
    void enterdetails();
    void showdetails();
};
```

(i) How many bytes will be required by an object of class Drug and an object of class PainReliever respectively?

(ii) Write names of all the data members which are accessible from the object of class PainReliever.

(iii) Write names of all the members accessible from member functions of class Tablet.

(iv) Write names of all the member functions which are accessible from objects of class PainReliever.

3) Write a Program to arrange subject names in ascending order for class subject with use of pointers to pointers.

4) Write a program to create a class shape with functions to find the area of and display the name of the shape and other essential components of the class. Create derived classes circle, rectangle and trapezoid each having overridden functions area and display. Write a suitable program to illustrate virtual functions.

5) Create a Distance class with appropriate member functions and data members. Write a program such that it gets a number of Distance values from the user, and write them to a disk file. Append them to existing values in the file, if any. When the user signals that no more values will be input, read the file and display all the values.

6) Create a class to add Two times provided in hour minute format. Use functions

a)void input() to provide hour and minute.

b) void gettime(int ,int) to take hour and minute entered by the user.

c)friend sum(time , time) to add minutes and hours.

If minutes are >60 add 1 with an hour.

d) void display() to display the result.