Lab 5

Introduction to C Programming

Marks: 8

Question 01:

Write a program that takes a number by user, considers it a value in kilometers and convert it into miles and yards.
(**Note:** There should be only 5 digits after the decimal point if output contains a fractional value)

Question 02:

You need to register yourself into the Library database for issuance of different ITC books. Library database requires your name, father's name, your semester and registration number. On the basis of your provided data library system assigns you a unique number i.e., 123.

Question 03:

Write down the following programs, display the output, if there is an error in program then correct it.

a. void main()
   { int a=b=c=10; a=b=c=50; printf("\n %d %d %d",a,b,c); }
b. Void main ( )
   { Double x=28; Int r; R= x%5; Printf ("\n r=%d", r); }
c. Void main ( )
   { Int I ; I=0x10+ 010+10; Printf ("\nx=%x", i); }
d. Void main ( )
   { Printf ("\n ABC\b\b\bInfo World"); }
e. void main ( )
   { printf("%d",'B' < 'A'); }
f. main()
   { int x , y ; x = 753; y = 722; printf(" x & y is %@" , x & y); }
g. main()
   { int x , y; x = 2003; x++; y = x++; y = x; y++; x—; x— printf ("%d%d",x,y);

Question 04:

Write a program that asks user to give number of days as input and returns the number of years, weeks, and days.

Question 05:

Write a program to evaluate the area and perimeter of rectangle. Ask user to supply length and breadth separately on the same line replacing the previous statement. Output screen should only print the answer in a comprehensive way e.g.

> *The area and perimeter of rectangle with length = _____ and breadth = _____ are respectively _____ and _____ units.*

Question 06:

Write a C program to print rhombus star (*) pattern series. The pattern should look like:

Question 07:

Write a program which takes two integers and interchange them without using additional variable.

Question 08:

An oxygen atom consists of 8 protons, 8 neutrons and 8 electrons if the mass of proton is $1.67e^{-24}$ gm and electron is approximately 2000 time lighter, then calculate the mass of oxygen atom. Let the program ask the mass of proton and user supplies it from keyboard.