

## **Basic Programs Questions Part 2**

Q.1 Write a C program to find the area and circumference of a circle when the radius of the circle is known as given by the user.

Q.2 Write a C Program to convert a given temperature from Fahrenheit to degree centigrade. Hint:  $C = (F - 32) * 5/9$ .

Q.3 Write a C Program to input two numbers and perform all arithmetic operations on them.

Q.4 Write a C program to enter length in centimeters and convert it into meters and kilometers.

Q.5 Write a C program to enter marks of five subjects and calculate total, average and percentage.

Q.6 Write a C program to enter P, T, R and calculate Simple Interest.

Q.7 Write a C Program to find the damped natural frequency:

For a certain electrical circuit with an inductance L and resistance R, the damped natural frequency is given by  $\text{Frequency} = \sqrt{(1/LC) - (R^2/R^2)/(4*C*C)}$ .

Q.8 Write a C Program for torque formula, where torque is given by

$$\text{Torque} = (2*m1*m2)*g/(m1+m2)$$

Q.9 Write a C program to prepare payslips using the following data.

Da = 10% of basic, Hra = 7.50% of basic, Ma = 300, Pf = 12.50% of basic, Gross = basic + Da + Hra + Ma, Nt = Gross – Pf.

Q.10 In inventory management, the economic order quantity for a (5) single item is given by  $\text{EOQ} = \sqrt{(2*dr*sc)/hc}$  and the optimal time between orders  $\text{TBO} = \sqrt{(2*sc)/(dr*hc)}$  Write a C program to compute EOQ and TBO ,given demand rate, setup costs, and the holding cost.

Q.11 Write a C program to convert days into years, weeks and days.

Q.12 Write a C Program to find area of an equilateral triangle Formula for the area of equilateral triangle is given by:

$$A = \frac{\sqrt{3}}{4} s^2$$