



# ANURAG GROUP OF INSTITUTIONS

Autonomous

School of Engineering

I – B. Tech – I – Semester – I - Assignment Examination

Subject: Programming For Problem Solving-I

(Common to ALL)

Time: 50Mins

Max.Marks:05

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Answer all the questions:

1. Explain the structure of 'C' program with an example.
2. Convert the following numbers to appropriate number systems.
  - a.  $1001100111_{(2)}$  to Decimal, Octal and Hexadecimal.
  - b.  $78_{(10)}$  to Binary, Octal and Hexadecimal.
  - c.  $665_{(8)}$  to Binary, Decimal and Hexadecimal.
  - d.  $12A9_{(16)}$  to Binary, Decimal and Octal.
4. Evaluate the Expressions
  - a.  $x = 3+4*5-6/3*4/8+2*6-4*3*2$
  - b.  $3+10*(16\%7)+2/4$
  - c. if  $a=5$ ,  $b=0$ , and  $c=-2$ , calculate  $(a\&c)*b\%2$
  - d. If  $x=12.8$ ,  $y=3.5$  then  $2*x/(3*y)$
  - e. If  $a = 11$ , what value will  $x$  be assigned for  $x = a++ \% 3$ .

5. Assess the output of the following program?

```
a. #include <stdio.h>
main( )
{
    int x = 10;
    int y = 20;
    x += y += 10;
    printf (" %d %d", x, y);
}
```

```
b. #include <stdio.h>
main( )
{
    int a = 1;
    int b = 1;
    int c = a || --b;
    int d = a-- && --b;
    printf("a = %d, b = %d, c = %d, d = %d", a, b, c, d);
}
```

