* K C - 6 0 1 3 *

KC-6013

B. E. I (Sem. I & II) Examination

November / December – 2012

Fundamentals of Computer Programming

Time : **2** Hours] [Total Marks : **50**

Instructions :

(1)

નીચે દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :

☛ B. E. I (SEM. I & II)

Name of the Subject :

☛ FUNDAMENTALS OF COMPUTER PROGRAMMING

☛ Subject Code No. : 6 0 1 3 ☛ Section No. (1, 2,.....) : Nil

Seat No. :

Student's Signature

(2) Make necessary assumption whenever required.

(3) Figure to right indicate marks.

1 (a) Define the following : (any **five**) **10**

(1) Structures in 'C'

(2) Logical Operators

(3) Machine Language

(4) Operating System

(5) Pointers

(6) Turbo 'C' compiler

(b) Write a program and draw the flow chart to find out sum and average of first 10 integers. **8**

OR

(b) Write a program and draw the flow chart to find out factorial of a given number. **8**

(c) What is the difference between while and do-while loop? **2**

2 (a) Answer the following : (any **three**) **9**

(i) Explain printf( ) and scanf( ) giving their syntax.

(ii) What is recursion? Explain it with suitable example.

(iii) Write short note on Pointer.

(iv) Explain switch ...case statement.

(b) Give the output of following C statements : (any **three**) **6**

(1)
```
main( )
{
    int m=5;
    if (m < 3) printf("%d", m+1);
    else if(m < 5) printf("%d", m+2);
    else if (m < 7) printf("%d", m+3);
    else printf("%d", m+4);
}
```

(2)
```
int n=0, m=1;
do
{
    printf(m);
    m++;
}
while (m <= n);
```

(3)
```
main()
{
    int m [] = {1,2,3,4,5}
    int x, y =0;
    for(x = 0; x < 5; x++)
        y=y+m [x];
    printf(%d", y);
}
```

(4)
```
int i;
for(i=5;i<15;i++) {
printf("%d/n",i);
i=i –1;
}
```

3 Answer the following : (any **three**) **15**

(1) Draw Block Diagram of Computer and Explain it.

(2) Explain System and application Software with example.

(3) Write a program to generate the following pattern.

1

22

333

4444

55555

(4) Why do we write functions or subroutines?

(5) Explain break and continue with example.
