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U-6013

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

April / May – 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. - 1 (SEM 1 & 2)

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**

(i) Arrays in 'C'

(ii) Relational Operators

(iii) High level Language

(iv) Operating System

(v) Header files

(vi) Goto statement

(b) Write a program and draw the flow chart to find out first 10 fibonacci numbers. 8

OR

(b) Write a program and draw the flow chart to findout maximum number from an array of 10 integers. 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) Explain in brief the features of C language.

(iii) What is "structure" ? How do we declare and access structure variables ?

(iv) Explain switch....case statement.

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

(i)
```
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);
}
```

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

(iii)
```
void main ()
{
int x [ ] = {1,2,3,4,5};
printf ("%d", fun (&x[2]));
}
int fun (int *a)
{
int i = 0 sum = 0;
for (i=0;i<2;i++, a++)
sum +=*a;
return (sum);
}
```

(iv)
```
void main ()
{
int x = 15, y;
y = x++;
printf ("%d %d", ++y, x++);
}
```

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

(i) Draw Block Diagram of Computer and explain it.

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

4444
333
22
1

(iii) Explain break and continue with example.

(iv) Explain various operators used in C language.

(v) Explain how string is defined in C. Write user defined functions for the following :

(a) strlen() : to find length of string

(b) strcat() : to concate two strings.
