Nepal College of Information Technology

Unit Test

Fall 2011

Program	:	BE ELX	Time	:	2 hrs
Semester	:	Fall (II)	FM	:	70
Subject	:	Programming in C	PM	:	35

- ✓ *Candidates are requested to give their answer as far as practicable in their own words.*
- ✓ *The figure in the margin indicates the full marks*
- ✓ ***Attempt <u>ALL</u> question***

1. a) Explain different generations of computer. Briefly distinguish high level language from low level language. 8
   b) What are algorithm and flow charts? Draw a flow chart which prints the highest of three numbers. 7
2. a) What is an operator? List and briefly describe different types of operators used in C programming language. 8
   b) What is an identifier? Specify the rules for defining it. Determine which of the following are valid identifiers if not specify the reason. 7
   (i) Array (ii) for (iii) l_name (iv) name and address
3. a) Write a menu driven program to perform following tasks according to the user input. 8

   <u>M E N U</u>

   i) To print the numbers in series (1 2 3 4 5 6…)
   ii) To find the number is odd or even.
   iii) To print cube of a number.
   iv) To print “thank you for using my program” message.

   b) Write the complete program which will generate the following output. 4

   0 2 3 4 5
   1 0 3 4 5
   1 2 0 4 5
   1 2 3 0 5
   1 2 3 4 0

   c) What will be the output after the execution of the following code? 3

```
void main ( )
  {
    int i;
    for ( i=1; i<5; i++ )
    printf (“%d\n”,i+1);
    for ( ; i<=50 ; )
    {
      if (i%5==0)
         i=i+5;
      else
         i++;
      printf(“\n %d”,i);
    }
  }
```

4. a) What is a function? What are the benefits of using them? Write a program using function (any type) to generate the Fibonacci Series (1, 1, 2, 3, 5, 8, 13…….) up to n^{th} terms. 8
   b) If A=17, B= 6 & C =2 what will be the final values of A, B & C after the execution of following statements. 7

   $B = {}^{--}B + {}^{++}A - C^{--}$
   $A = {}^{++}A + A^{++} + {}^{++}B$
   $C = A^{++} + B^{--} + {}^{++}C$

5. Write short notes on (any two) 2*5=10
   a) while and do-while loop
   b) Constants and variable
   c) Program Documentation