The Open University of Sri Lanka
B.Sc. Degree Program – Level 03
Closed Book Test: 2005/2006
CSU 1180: **Programming Prospectives and Languages**

Duration: 1½ Hours

Date: **28.08.06**	*Time :* **3.30pm to 5.00pm**

Answer all Three Questions

Q1.

i) Describe and distinguish between "arrays" and "packed arrays" in Pascal.

ii) Write syntaxes of functions and procedures in Pascal. Also explain the differences between them.

iii) Write a program to readin and display the following information of ten persons

- Name
- Address
- Age
- Salary

Q2.

i) What are the outputs of the following programs?

a)

```c
#include<stdio.h>

main()
    {
            int x = 14, y = 8, p=11, q = 7;
            int a,b,c,d;
            a = x + (y + q);
            b = q + (x--);
            c = p + (y++);
            d = y + (--x);
            printf("Answer of = a%d\n",a);
            printf("Answer of = b%d\n",b);
            printf("Answer of = c%d\n",c);
            printf("Answer of = d%f\n",d);
    }
```

b)
```c
#include<stdio.h>
  main()
   {
 printf("\n\t\t Subjects\n\t ----------\n\t\t CSU 1180\n\t\t CSU1179\n\t-------");
   }
```

ii) Identify the syntax errors in the following C program and write the corrected program.

```c
#include<stdio.h>

main();
{
        int a;
        printf("Enter a number :"\n);
        scan("%f"a);
        switch(a);
        {
                case one; printf('one');
                case two; printf('two');
                case three;printf('three');
                default;printf('invalid number');
        }
```

iii) Write a program to enter two numbers and calculate the addition, subtraction, multiplication and division of them.

Q3.

i) Describe *all operators* in C language.

ii) What are the input and output functions in C language.

iii) Convert the following Pascal codes into C language.

```
a)  FOR x := 1 DOWNTO 20 DO
        Writeln(x);

b)  IF ( x>10) THEN
        Writeln('one')
    ELSE
        Writeln('two');

c)  CASE  number OF
            1:writeln('one');
            2:writeln('two');
            3:writeln('three');
    END;
```