

THE OPEN UNIVERSITY OF SRI LANKA
 DEPARTMENT OF COMPUTER SCIENCE
 B.Sc. DEGREE PROGRAMME : LEVEL 03
 CSU3200 - INTRODUCTION TO COMPUTER PROGRAMMING
 CLOSED BOOK TEST - 2017/2018



DURATION: One Hour (1 Hour)

Date: 19.06.2018

Time: 4.15 p.m. - 5.15 p.m.

ANSWER ALL QUESTIONS.

QUESTION 01

- State the difference between `puts()` and `printf()` functions.
- Convert the following statement into if else statement.

$$C = (A < B) ? A : B;$$
- Following is an expression of a C program. What is the value of 'X' after this expression is executed?

$$X = 10 + (8 + 4) / (5 + 1) - 6;$$
- If the variable $x=16$ and variable $y=4$, write the values of x and y after the execution of each of the following statements.
 - $y += x;$
 - $x -= y;$
 - $y *= x;$
 - $x /= y;$
- What is the output of the following program, if we enter the value 20 as radius?

```
#include<stdio.h>
#define pi 3.14159
int main()
{
  float r;
  printf("\n Enter the radius in mm :");
  scanf ("%f", &r);
  printf("\n The perimeter is %.3f" ,2*pi*r) ;
  return 0;
}
```

QUESTION 02

- a) State the three logical operators in C language.
- b) State the meaning of each of the following backslash codes.
- '\\'
 - '\?'
 - '\0'
- c) Write the size of given data types in bits.
- char
 - int
 - float
 - double
 - void
- d) If the variable 'b' has the value 21, what are the values of 'b' and 'a' after each of the following statement is executed separately.
- a = b--;
 - a = --b;
 - a = b++;
 - a = ++b;
- e) What is the output of the following program?

```
#include<stdio.h>
int main()
{
    int a[10] = {10,20,30,40,50,60,70,80,90,100};
    int b[9];
    int c,d;

    for( c=0; c<9; c++)
        b[c] =a[c]+a[c+1];

    for(d=0; d<9; d++)
        printf("%d\n", b[d]);
    return 0;
}
```

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