International Islamic University Chittagong
Department of Electrical and Electronic Engineering

Final Examination Spring-2020   Program: B.Sc. Engg. (EEE)
Course Code: **CSE-1105**   Course Title: Computer Programming I
Time: **5 hours** (Writing **4 hours 30**   Full Marks: **50** (**Written** 30 + **Viva**/**Viva-Quiz**-20)
minutes + **30 minutes** submission time)

[Answer each of the questions **(1-5)** from the followings; Figures in the right margin indicate full marks.**]**

<mark>**SET-C-1-Matric ID- ODD**</mark>

1(a).	Why do statement is used? Compare do statement with the nested for statement.	**C01**	**R,A** 02
1(b).	What is the output of the following program?	**C03**	**R, A** 02

```c
#include<stdio.h>

main()
{
  char *s = "IIUC";

  while(*s!=NULL)
  printf("%c", *++s);
}
```

1(c).	Convert the following program from for loop to while loop.	**C02**	**U,AN** 02

```c
int i, n = 10;
for (i=0; i<n; i++)
  {
      printf ("I like for loop.\n");
      printf ("%d\n",i);
      printf ("I also like while loop.\n");     }
```

2(a).	What is the important of an array? Explain the initialization of an array.	**C01 C02**	**CEU R, A** 02
2(b).	Write a program to multiply two 3*3 matrix.	**C02**	**R, AN** 02
2(c).	What will be output if you will execute following c code?		02

```c
#include<stdio.h>
#define var 3
void main(){
   short num[3][2]={4,8,15,2,55,88};
   printf("%d  %d",*(num+1)[1],**(num+3));
}
```

3(a).	What is a pointer variable? What are the advantages & disadvantages of using pointers in C?	**C02**	**CEU** 02
3(b).	Write a program to find biggest among three numbers using pointer	**C02**	**CEU** 02
3(c).	What will be the output of the program ?	**C02**	**U,R** 02

```c
int main()
{
    int x=30, *y, *z;
    y=&x; /* Assume address of x is 500 and integer is 4 byte size */
    z=y;
    *y++=*z++;
    x++;
    printf("x=%d, y=%d, z=%d\n", x, y, z);
    return 0;
}
```

4(a).	What's wrong with this call- **FILE *fp = fopen("c:\oldfr\sample.dat", 'r');**	C02	**R**	02
4(b).	What is recursion?give an example.	C02	**U**	02

4(c).	Find errors, if any, in each of the following segment.
	a) if (x + y = z && y > 0);
	printf(" ");
	
	b) if (code > 1);
	a=b+c
	else;
	a=0
	c) if (p<0) || (q<0);
	printf(string is negative).
		C01	**R,U**	02

5(a).	Write a C program to add two distances entered by user. Measurement of distance should be in inch and feet.(Note: 12 inches = 1 foot).using Structure	C02	**R, A**	02

5(b).	Which of the statements is correct about the program?
	int main()
	{
	  int i=10;
	  int *j=&i;
	  return 0;
	}
		C03	**U,AN**	02

5(c).	Compare between Array and Structure. Give the prototype of "Union".	C01	**CEU**	02
6.	Viva/Viva-Quiz: The time of viva/viva-quiz will be declared in google classroom.	CO4	**R**	20