



NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES
(KARACHI CAMPUS)
Department of Computer Sciences
First Mid-Term Examinations Spring 2016

Subject: Introduction to Computing -CS101
Total Time: 60 Minutes
Course Instructor: Muhammad Shahzad

Date: 15th February, 2016
Total Marks: 17

Section/GR: _____

Roll Number: _____

You are advised to READ these notes:

- Attempt all questions.
- After asked to commence the exam, please verify that you have **three (3) different printed pages** including this title page.
- It is advisable to go through the paper once before starting with the first question.
- All questions don't carry **equal marks**. Marks of subparts are equally distributed.
- Exam is a closed books and closed notes.
- Don't use pencil , write in dark blue or black pen.

Q1): What will be the output of the following programs (Assuming that the program executes correctly)

[04]

(i): main()

```
{
    int num[26], temp;
    num[0]=100;
    num[25] = 200;
    temp = num[25];
    num[25] = num[0];
    num[0] = temp;
    printf("\b %d %d", num[0], num[25]);
}
```

(ii): main()

```
{
    int i = 1, j = 1 ;
    for ( ; ; )
    {
        if ( i > 5 )
            break ;
        else
            j += i ;
        printf ( "\n%d", j ) ;
        i += j ;
    }
}
```

(iii): What will be the result is in the variable **k** after execution of the following statements?

```
int j=1, k = 4;
while(++j <= 10)
k++;
```

(iv): What value gets stored in variable **c** after the following instructions are executed?

```
int a, b, c;
a=7;
b=2;
c=b+a/b%2-1;
```

Q2): Write down the programs for the following problem statements (No need to write header files): **[08]**

1. Write a program that prints “equal” if the two arrays are equal and “not equal” if they are not equal (Don't use string functions).
2. Write a program that prints following pattern (Use nested loop).

C1	C3	C5	C7
B1	B3	B5	B7
A1	A3	A5	A7
3. Write a program that prints the integers -7 to +7. Print three integers per line.
4. Write a program that first asks the user for an integer, N, and then print the first N odd integers starting with 1, one per line.

Q3) Find the errors in following program and rewrite the statements with the line number

[02]

```
1. main()
2. {
3. double g = "9.8";
4. printf("Enter The mass of body");
5. scanf("%f",&mass);
6. double wight = mass * g;
7. printf("Wight of body is %f ", wight);
8. int num,
9. int counter,
10. if (wight => 50.0)
11. {
12. num == 30;
13. counter = 5;
14. }
15. else if (wight => 25.0)
16. {
17. num == 20;
18. counter = 3;
19. }
20. else()
21. {
22. num == 10;
23. counter = 2;
24. }
25. Do
26. {
27. printf("%d", num);
28. counter--;
29. }while (counter != 0);
30. float pi = 3.14;
31. printf("Enter radius ");
32. scanf("%f", radius);
33. printf("Area of Circle is %f", (pi * Radius * Radius));
34. }
```

Q4) Write a program that asks user an arithmetic operator('+','-','*' or '/') and two operands and perform the corresponding calculation on the operands.

[03]

Note: Use only switch-statement