

Subject: Fundamentals of Programming (FOP).

Program: BSCS.

Section: F/G.

Faculty Name: Momal Rehman.

Marks allocated: 20 Marks.

Date of Midterm Exam: 27th November 2020.

Duration of assessment: 10:45 am till 1:00pm.

Code: B (Odd IDs).

Q1) Multiple Choice Questions (MCQs);

[3]

1. C programs are converted into machine language with the help of

- | | |
|--------------------------|------------------------|
| (a) An Editor. | (b) A compiler. |
| (c) An operating system. | (d) None of the above. |

2. Which of the following statement is wrong:

- | | |
|----------------------|----------------------|
| (a) mes = 123.56; | (b) con = 'T' * 'A'; |
| (c) this = 'T' * 20; | (d) 3 + a = b; |

3. Which of the following statement is used to take the control to the beginning of the loop?

- | | |
|--------------|------------------------|
| (a) exit. | (b) break |
| (c) continue | (d) None of the above. |

Q2) Predict the Output:

[1.5]

```
a. int main() {  
    int i=3;
```

```
if(i=4) {  
  
printf("This block is executed"); }  
  
else { printf("NO! I am boss"); }}
```

b. `int main(){`

`int i = 5;`

`int a = --i + ++i - i-- + --i;`

`printf("%d",a);`

`return 0;}`

c. `main(){`

`float a = 3.5 ;`

`switch (a){`

`case 0.5 :`

`printf ("The art of C");break ;`

`case 1.5 :`

`printf ("The spirit of C");break ;`

`case 2.5 :`

`printf (" See through C");break ;}}`

Q3) Write only condition:

[1.5]

- (a) whether the number is odd or not.
- (b) whether the number is even or not.

(c) the absolute value of a number.

Q4) Convert the following equations into corresponding C statements. [1]

(a) $R = 2v + 6.22 (c + d) / g + v$

Q5) Write a C program to find the place value of two-digit number and then swap those values. [4]

TEST DATA:

Enter number:45

Before Swapping:

Unit =5 Tens=4

After Swapping

Unit=4 Tenth=5

Q6) If the ages of person A, B and c are input through the keyboard, write a program to determine the eldest of the three. [4]

TEST DATA:

Enter Person 1 Value: 5

Enter Person 2 Value: 15

Enter Person 3 Value: 8

The eldest of three is person 2 of age 15

Q7) write a menu driven program to find the area and perimeter of the following shapes:

[5]

1. Circle.
2. Square.
3. Rectangle.
4. Exit.

TEST DATA:

Options available are:

1. Circle.
2. Square.
3. Rectangle.
4. Exit.

Enter your choice: 2

Shape is Square.

Enter length in meters: 3

Area of square is 9 m^2 .

Perimeter of Square is 8m.