

Quiz 1: Set A

Introduction to Computing and Programming (CSD101)

Date: 12-09-2024 Max. Marks: 15

Duration: 35 min.

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1. If integer needs two bytes of storage, then maximum value of unsigned integer is

(a)
$$2^{16} - 1$$

(b)
$$2^{15} - 1$$

(1 mark)

Solution: 216



2. Match the following:

(2 marks)



a)	;	t) Output function
6)	%f, %d, %c	2) function
3	printf	3) Address Operator
d)	main()	y) Format specifier
e)	&	5) Statement terminator

Solution:
$$(A) \rightarrow (B)$$
 $(A) \rightarrow (A)$ $(B) \rightarrow (A)$ $(C) \rightarrow (B)$ $(C) \rightarrow (B)$

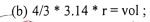
3. Point out the errors, if any in the following C statements

3.1

(0.5 mark)

(a) char = '5';

Solution: No error



(0.5 marks) rol= (float) 4/3* 3.14*r*r*r; → lorrented statement

(1 mark)

#include<stdio.h> int main(){ int a = 3, b = 4, c; c = b - a;switch (c)

{ case 1 || 2:

case 1: >> corrected statement

printf("Help the needy people\n");

Output=49 as a-==49.

6. What are the functions of computers?

(1 mark)

Functions of computers are as follows:

- (a) Accepting data from user (Input)
- (b) Phocessing the given data based on instructions given (Processing)
- (c) Showing Displaying the result (Output)
 (d) Storing the data (Storage)
- - 7. What is the significance of the default case in a switch statement?

(1 mark)

In a switch statement, when none of the cases are executed, the default case is executed.

When none of the case statements satisfy the condition, the default case is executed.

- 8. Convert the numbers in the given format
- **8.1** (21.35)₁₀ to ()₂

Solution:

(1 mark)

$$0.35 \times 2 = 0.7 \mid 0$$

 $0.7 \times 2 = 1.4 \mid 1$
 $0.4 \times 2 = 0.8 \mid 0$
 $0.8 \times 2 = |-6| \mid 4$

0101

(21.35),0 ≈ (10101.0101)2

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(1 mark)
     8.2 (2BD.2A)<sub>16</sub> to (?)<sub>10</sub>
     Solution:
   (2BD. 2A)16
 = 512+ 176+13 =701
                                - 0.164
    9. Write a C program to check whether a number is palindrome or not
                                                                       (2 marks)
    Program:
   # include < stdio h >
   int main ()
   int num;
   printf ("Enter number to check:");
  scanf ("1.d", Enum);
  while True &
  num1 = num % 10;
  num 2 = num/10;
 num 3 = (num 1* 100) + (num 2* 10);
if (num1 == num3) {
    printf("they are palindrome");
else &
    print ("They we not palindrome");
```