SRM
SRM Institute of Science and Technology
Faculty of Engineering and Technology
School of Computing

SET F

Reg No:

CYCLE TEST – I
Academic Year: 2022-2023 (ODD Semester)

Program offered: B.Tech (All Branches)
Max. Marks: 25
Duration: 50 minutes

Year / Sem: I / I
Date: 13-10-2022

Course Code and Title: 21CSS101J: Programming for Problem Solving

Course Learning Rationale (CLR):

CLR-1: Think and evolve with a logic to construct an algorithm and pseudo code that can be converted into a program.

Course Learning Outcomes (CLO):

CLO-1: To solve problems through computer programming. Express the basic data types and variables in C

Part A (10*1=10 Marks)

Sl. No	Question	CO	PO	BL	Marks	PI CODE
1	Identify the statement is not a valid variable name declaration? • int_a3; • int a_3; • int 3_a; • int_3a;	1	1	1	1	1.6.1
2	C programs are converted into machine language with the help of • An Editor • A compiler • An operating system • Debugger	1	2	1	1	2.5.2
3	..............is not a real programming code, but it models and may even look like programming code. • Algorithm • Flowchart • Pseudocode • Sequence of Instructions	1	2	1	1	

4	Identify the operator is not belongs to relational operation	1	2	1	1	
	• && • != • == • <=					
5	Find the output for the following code	1	2	3	1	

```
#include<stdio.h>
Void main()
{
    int a,b;
    a=5;
    b=6;
printf("%d", a<b);
printf(%d",a>b);
printf("%d",a!=b);
printf(%d",a==b)
```

- 1010
- 0101
- 5556
- d)5656

6	Find the output of the following code	1	2	3	1	

```
#include<stdio.h>
void main()
{
    float a=2.3456;
    int b=6;
    printf("%0.2f/t %d",a,b);
}
```

- 2.3456   6
- 2.34   6
- Compiler error
- 6   2.34

7	Find the output of the given code	1	2	3	1	

```
#include<stdio.h>
void main()
{
int a,b;
a=13;
b=a>>2;
printf("%d",b);
}
```

- 52
- 3
- 10
- 2

8	Find the output of the following code snippet.						

```c
#include<stdio.h>
void main()
{
int a,b;
a=5;
b=7;
a++;
printf("%d %d", a,b++);
}
```

- 5 7
- 5 8
- 6 7
- 6 8

9.	Find the value of b and c in this C code						

```c
#include<stdio.h>
void main()
{
int a,b,c;
a=5;


b=(a++)*2;
c=(--a)*2;

printf("%d %d", b,c);
}
```

- 12 10
- B. 12 8
- C. 10 10
- D. 10 8

10	Find The Output Of The Following Code Snippet						

```c
int a=10;
float b=2.5;
char c='a';
printf("%d",sizeof(a));
printf(" %d",sizeof(a));
printf(" %d",sizeof(a));
```

- 10 2.2 a
- 2 4 1
- 1 2 4
- a 2.2 10

Part B (5*2=10 Marks) Answer all questions

Sl.No	Question	CO	PO	BL	Marks	PI Code
11	List the properties of an algorithm.	1	2	1	2	2.6.3
12	List out the formatted input and output functions in C with its syntax and descriptions	1	2	1	2	2.6.3
13	Differentiate between constants and variables. Write down the rules for naming variables.	1	2	2	2	2.6.5
14	If a single character input through the keyboard, write a C program to print the ASCII value of a character	1	2	3	2	2.6.3
15	A man has deposited Rs.10000 in a bank for 5 year with the rate of interest 7.5%. Write a C program to find the simple interest and print the value in 2 decimal places.	1	2	3	2	2.6.3

Part C(1*5=5 Marks)

Sl.No	Question	CO	PO	BL	Marks	PI Code
16	Kamal's basic salary is inputted through the keyboard. His dearness allowance is 30% of basic salary, house rent allowance is 25% of basic salary and dearness allowance is 14 % of basic salary. Write a C program to calculate his gross salary.	1	2	3	5	2.6.3
	(OR)					
17	Develop a C program to read a number from the user and multiply the last digit and second last digit. Sample Input: N = 3469 Output: 6 * 9 = 54	1	2	3	5	2.6.3

Course Outcome (CO) and Bloom's level (BL) Coverage in Questions

21CSS101J.Programming for Problem Solving - CT1 CO-Coverage

	CO1	CO2	CO3	CO4	CO5
Series1	17	0	0	0	0

21CSS101J.Programming for Problem Solving - CT1 BL-Coverage