Ramaiah Institute of Technology
(Autonomous Institute, Affiliated to VTU)
Department of Computer Science and Engineering

Programme: B.E | **Term: Nov-March 2023**
Course :Principles of Programming Using C | **CourseCode :PPC18**
CIE: Test II | **SEM:I** | **Section:A to J**
Max Marks: 30 | **Time: 1Hr** | **Portions for Test: L16-28**
Date:13/03/2023

Instructions to Candidates:

1. Answer **two** full questions. **Question one is compulsory**.
2. Each Question carries **15Marks**.
3. Mobiles, smart watches or any electronic gadgets are strictly banned.

Sl#	Question	Marks	Bloom's Level	CO Mapping
1 a)	**A. What would be printed from the following program block?**	02M	L3	CO4

```
#include <stdio.h>
#include <string.h>
int main()
{
   char s1[50]="xyzt";
   char s2[50]="xyzt";
   int dif;
   dif=strcmp(s1,s2);
   printf("\n%d",dif);
   return 0;
}
```

```
#include <stdio.h>
#include <string.h>
int main()
{
   char s1[50]="xyzt";
   char s2[50]="xyAt";
   int dif;
   dif=strcmp(s1,s2);
   printf("\n%d",dif);
   return 0;
}
```

	B. Variable defined within a block have a global scope. a. true b. false	02M	
	C. A structure variable is used to declare a type containing multiple fields. c. true d. false		
	D. The _____ Operator is used with a pointer to dereference the address contained in the pointer. a. address(&) b. assignment(=) c. indirection(*) d. pointer(^) e. selection(->)	01M	
b)	Explain user defined function declaration and definition with an example.	05M	L2	CO3
c)	Discuss the structure type declaration and initialization with an example.	05M	L2	CO5

P.T.O

2 a)	**What would be printed from the following program block?**
	#include<stdio.h>
	int main()
	{
	char c[]= "welcome to M S Ramaiah Institute of technology";
	char *p;
	int i;
	for(p=&c[5]; p>=&c[0]; p--)
	printf("%c", *p);
	printf("\n");
	for(p=c+5, i=0; p>=c; p--,i++)
	printf("%c", *(p-i));
	}
		03M	L3	CO4

b)	Illustrate storage class specifiers in C programming with an example.	06M	L2	CO5
c)	Write a C program to swap two numbers using call by value and call by reference.	06M	L3	CO3

3 a)	**What would be printed from the following program block?**
	
	#include<stdio.h>
	int main()
	{
	int a =7;
	int b =9;
	int *p =&a;
	int *q=&b;
	printf("%d\n", ++a);
	printf("%d\n", ++(*p));
	printf("%d\n", --(*q));
	printf("%d\n", --b);
	}
		03M	L3	CO4

b)	Explain enumerated types in C programming with an examples.	06M	L2	CO5
c)	Write a C program to read two string, concatenate them without using built-in functions.	06M	L3	CO3

Course Outcomes meant to be assessed by the IA Test: CO3, CO4& CO5

1. Explore Arrays and User-Defined Functions in Implementing Solutions to Real world Problems
2. Illustrate the usage of Storage Classes, Strings and Pointers in Problem Solving.
3. Demonstrate the use of Modular Programming Constructs involving Files, Structure & Unions