

United College of Engineering and Research, Prayagraj  
Department of Applied Sciences & Humanities  
B.Tech.

2<sup>nd</sup> Sessional Examination (2020-21)

Semester: I SEM

Subject Name: Programming for Problem Solving

Time: 2:00 Hour

Subject Code: KCS-101

Max Marks: 30

<u>Section-A</u>				
Question No.	Questions	Max. Marks	CO	BL
1	Attempt all			
a	Explain the significance of null character in string.	1	CO4	L2
b	Differentiate between Structure and Array.	1	CO4	L2
c	Define recursion with example.	1	CO3	L2
d	Define pointers.	1	CO4	L2
e	Explain function prototype? Why is it required?	1	CO3	L2
f	<pre>#define PRODUCT(n) (n*n) #include&lt;stdio.h&gt; void main() {     int j;     j=64/PRODUCT(4);     printf("%d", j); }</pre> Find the output of above program	1	CO5	L2

<u>Section-B</u>				
2	Attempt Any three			
a	What do you mean by call by value and call by reference? Write a program for swapping two numbers using call by reference technique.	3	CO3	L2
b	Write a program to multiply two matrices of dimension 3*3 and store result in another matrix.	3	CO4	L2
c	Write a C program to print fibonacci series using recursion.	3	CO3	L2
d	Write a C program to check given two strings are palindrome or not.	3	CO4	L2

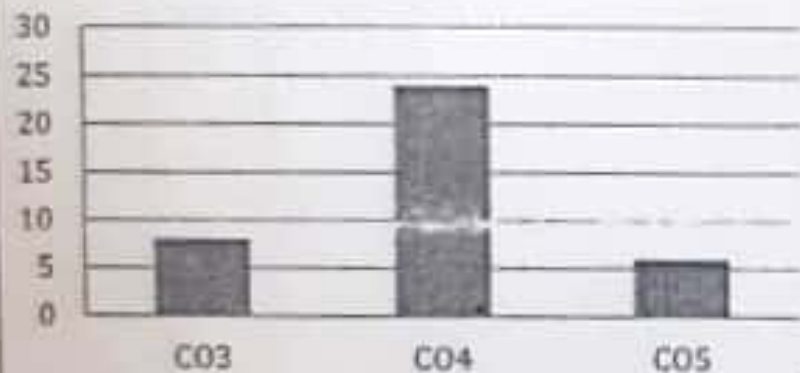
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### Section-C

3	<b>Attempt any three</b>			
a	Explain selection sort technique for solving problem. Also write an algorithm for selection sort. Sort the following numbers using selection sort technique 4, 26, 54, 93, 17, 77, 31.	5	CO4	L3
b	Define a structure? Write a program in C to create a data base of fifty students to store personal details such as roll-no., name and marks. Print all the details of student whose name is entered by the user.	5	CO4	L3
c	Define string. Write short notes on following string function 1. Strcat( ) 2. Strcmp( ) 3. strrev( ) 4. Strlen( )	5	CO4	L2
d	What are the different file opening mode in C. Write a program copy the content of one file into other file	5	CO5	L2

~\*Best of Luck\*~

Course Outcome Wise  
Marks Distribution



Bloom level marks  
distribution

