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BMS College of Engineering, Bangalore-560019

(Autonomous Institute, Affiliated to VTU, Belgaum)

July / August 2017 Supplementary Semester Examinations

Course: **C PROGRAMMING** Duration: **3 hrs**
Course Code: **14CS1ICCCP / 14CS2ICCCP** Max Marks: **100**
Date: 29.07.2017

Instructions: **1. Answer any five full questions choosing one from each unit.**
2. Assume missing data (if any) suitably.

UNIT 1

1.	a)	Develop a program for finding the largest of three numbers without using branching statements.	**06**
	b)	Illustrate the different types of constants available in C language with examples.	**07**
	c)	Evaluate the given expression i) 10+2>6&&2||!7&&11-2<=5 ii) a+=b--=c*10 given a=7,b=7,c=7	**07**

UNIT 2

2.	a)	Explain different conditional branching statements with examples.	**12**
	b)	Develop a program to check whether entered number is prime or not	**04**
	c)	Write a program to display the sum of digits of a number entered by the user.	**04**

OR

3.	a)	Develop a program that accepts a number from 1 to 10. Print whether the number is even or odd without using iterative statement.	**06**
	b)	Develop a program to print the following pattern 1 2 2 3 3 3 and so on up to the number of lines input by the user.	**06**
	c)	List the difference between break and continue statements.	**08**

UNIT 3

4.	a)	Explain the different ways of passing parameters to functions.	**08**
	b)	Develop a code to perform multiplication of two matrices of order mXn	**09**
	c)	Explain the initialization of one dimensional array with an example.	**03**

UNIT 4

5.	a)	Define String. Develop a program to convert characters of an input string into uppercase if lower and vice versa. Give sample outputs.	**10**
	b)	Illustrate self-referential structure with example.	**04**
	c)	Define structure. How do you declare a structure and initialize structure?	**06**

OR

6.	a)	Explain nested structures with an example.	**10**
	b)	Develop a C program to perform concatenation of two strings.	**06**

c) Write the output for the following program **04**

```
#include <stdio.h>
int main()
{
char s[]="Hello, BMSCE";
printf(">>%s<<\n",s);
printf(">>%20s<<\n",s);
printf(">>%-20s<<\n",s);
printf(">>%.4s<<\n",s);
return 0;
}
```

UNIT 5

7. a) Define a pointer? Develop a program to find the sum and mean of all elements in an array using pointers. **10**

   b) Illustrate different input and output operations in files. **06**

   c) Explain the general syntax of malloc function and give its usage **04**

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