A **Reg. No. :** | | | | | | | | | | |

Question Paper Code : 51207

B.E./B.Tech. DEGREE EXAMINATION, NOV 2018

First Semester

Civil Engineering

15UCS107- COMPUTER PROGRAMMING

(Common to ALL branches)

(Regulation 2015)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. ALU is_____ CO1-R

   (a) Arithmetic logic unit (b) Array logic unit

   (c) Application logic unit (d) Accurate logic unit

2. _____is a step by step method of solving a problem. CO1-R

   (a) Flow chart (b) Pseudo code (c) Algorithm (d) Computation

3. Which one is not a correct variable in C language CO2-R

   (a) Float (b) Int (c) Real (d) Char

4. Which of the following operator takes only integer operands? CO2-U

   (a) + (b) * (c) / (d) %

5. The type of controlling expression of a switch statement cannot be of the type_____ CO3- U

   (a) Int (b) Char (c) Long (d) Float

6. Which command is used to skip the rest of a loop and carry on from the top of the loop again? CO3- U

   (a) Break (b) Resume (c) Continue (d) Skip

7. An array elements are always stored in _____memory location CO4- U

(a) Sequential (b) Random

(c) Sequential and random (d) None of these

8. What will happen after compiling and running following code? CO4- U

```
main()
{
printf("%p",main);
}
```

(a) Syntax Error (b) Will make an infinite loop

(c) Some address will be printed (d) Semantic error

9. Correct way of declaring float pointer is _____. CO5- U

(a) Float ptr (b) Float *ptr (c) *Float ptr (d) Float ptr ()

10. Point out the error in the program CO5- U

```
Struct emp
{
int ecode;
struct emp e;
}
```

(a) Error in structure declaration (b) Linker error

(c) No error (d) Compilation error

PART – B (5 x 2= 10 Marks)

11. Differentiate algorithm and pseudo code. CO1- U

12. Visualize the structure of a ‘C’ program. CO2- R

13. State the advantages of goto and switch statement. CO3- U

14. Define function. CO4- R

15. Summarize pre-processor directives in ‘C’ program. CO5- U

PART – C (5 x 16= 80 Marks)

16.	(a)	Illustrate basic Organization of a Computer with neat sketch.	CO1- U	(16)
		Or		
	(b)	Define flow chart. For an integer n greater than or equal to 1, the factorial is the product of all integers less than or equal to n but greater than or equal to 1. The factorial value of 0 is defined as equal to 1. For example, 5! = 5 x 4 x 3 x 2 x 1 =120. Draw a flow chart to generate a factorial of a number.	CO1- App	(16)
17.	(a)	List the different data types and its control string to read and display. Write a simple C program to examine the above.	CO2- U	(16)
		Or		
	(b)	Describe about formatted and unformatted input and output functions with example.	CO2- U	(16)
18.	(a)	The Fibonacci sequence is a set of numbers that starts with a one or a zero, followed by a one, and proceeds based on the rule that each number is equal to the sum of the preceding two numbers. First few numbers of series are 0, 1, 1, 2, 3, 5, 8 etc., write a C program to develop Fibonacci series	CO3- App	(16)
		Or		
	(b)	A numeral palindrome is a number that remains the same when its digits are reversed. For example 16461, it is "symmetrical". Write a C program to find the given number is palindrome or not.	CO3- App	(16)
19.	(a)	Explain any four string handling functions with an example.	CO4- U	(16)
		Or		
	(b)	Interpret about call by value and call by reference with suitable example.	CO4- U	(16)
20.	(a)	Paraphrase the concept of Dynamic memory allocation with its advantages and disadvantages.	CO5- U	(16)
		Or		
	(b)	Develop a 'C' program to store information of 5 students from the user. Create a structure to store the name, regno, dept, marks and total. Create marks as a structure within the structure. Calculate the total and print it.	CO5- App	(16)