Reg. No. : | | | | | | | | | | |

Question Paper Code: 41216

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2016

First Semester

Civil Engineering

14UCS106 – COMPUTER PROGRAMMING

(Common to ALL branches)

(Regulation 2014)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 1 = 10 Marks)

1. Which of the following is responsible for controlling all the operations of all other units of a computer system.

(a) CPU (b) ALU (c) GPU (d) MU

2. _____ is programming analysis tool that is used for planning program logic.

(a) Algorithm (b) Flow chart (c) Pseudo code (d) High level languages

3. Which of the following is not a keyword of 'C'?

(a) auto (b) register (c) int (d) function

4. The statement that transfers control to the beginning of the loop is called

(a) Break (b) Exit (c) Continue (d) Goto

5. If an array is used as function argument, the array is passed as

(a) By value (b) By reference
(c) By name (d) The array cannot be passed as function argument

6. Which header file is essential for using strcmp() function?

(a) string.h (b) strings.h (c) text.h (d) strcmp.h

7. Which of the following operation cannot be performed on pointers in C?

(a) Addition of two pointers
(b) Subtraction of a number from a pointer
(c) Subtraction of one pointer from another
(d) Addition of a number to a pointer

8. malloc () function used in dynamic allocation is available in which header file?

(a) stdio.h (b) stdlib.h (c) conio.h (d) mem.h

9. Given the statement, maruti.engine.bolts=25, which of the following is true?

(a) Structure bolts is nested within structure engine
(b) Structure engine is nested within structure maruti
(c) Structure maruti is nested within structure engine
(d) Structure bolts is nested within structure bolts

10. calloc ( ) takes____ number of arguments.

(a) 1 (b) 2 (c) 3 (d) 4

PART - B (5 x 2 = 10 Marks)

11. Define: Algorithm and Pseudo code.

12. What is meant by Enumerated data type?

13. Give any two functions related to string handling.

14. Distinguish between Call by value and Call by reference.

15. Give some examples for preprocessor directives.

PART - C (5 x 16 = 80 Marks)

16. (a) Elaborate on different generations and classifications of computers. (16)

Or

(b) (i) Explain the various phases involved in problem solving. (8)

(ii) With suitable example explain the need for flowchart. (8)

17. (a) (i) What are Operators and operands? Mention various types of operators in C. (10)

(ii) Write a C program to find given year is leap year or not. (6)

Or

(b) (i) Write a C program to reverse digits of a given number (8)

(ii) Explain about various looping statements in C and compare them. (8)

18. (a) (i) Write a program using pointers to read an array of integers and print its elements in ascending order. (8)

(ii) With suitable examples explain the string handling functions. (8)

Or

(b) (i) Write a C program to find whether the given word is palindrome. (8)

(ii) Write a program to add two N x N matrices. (8)

19. (a) (i) Write a C program to print Fibonacci series using recursive functions (8)

(ii) Explain about different parameter passing methods in C with example. (8)

Or

(b) Discuss about dynamic memory allocation in detail. (16)

20. (a) What is the difference between structures and unions? With suitable examples substantiate the above point. (16)

Or

(b) (i) Explain in detail on preprocessor directives in C. (10)

(ii) State the need and operation of union with suitable example. (6)

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