

Avinashilingam Institute for Home Science and Higher Education for Women
(Deemed to be University), Coimbatore – 641 043

Master's Degree Examination – November 2018
Semester I

Class : I P.G.
Major: Computer Applications

Max. Marks: 60
Time: 3 Hrs

17MCAC05 Programming in C

PART A
Choose the Correct Answer

10 x ½ = 5 Marks

1. _____ is the largest value that an unsigned short int type variable can store.
a.256 b.257 c.255 d.126
2. The _____ operator returns the number of bytes the operand occupies.
a. sizeof b. bitwise c. length d. logical
3. The sentinel-controlled loop is also known as _____ loop.
a. counter- b. definite c. indefinite d. variable-controlled
cotrolled repetition repetition
4. An array created at runtime using malloc function is referred to as _____ array.
a. Static b. Fixed c. Memory d. Dynamic
5. A function that calls itself is called _____ function.
a. Recursive b. Refractive c. Reflective d. Recall
6. The parameter used in a function call are called _____ parameters.
a. Formal b. Actual c. Real d. Fixed
7. A pointer variable contains as its value the _____ of another variable.
a. Value b. Name c. Address d. Position
8. The name of the structure is referred to as _____ name.
a. Tag b. Struct c. Variable d. Static
9. The _____ mode is used for opening a file for updating.
a. r b. r+ c. a d. a+
10. The _____ function gives the current position in the file.
a. fseek() b. ftell() c. fposition() d. fcurrent()

PART B

5 x 4 = 20

Answer All Questions

(Each answer should not exceed 200 words or one page)

- 11.(a) Describe the basic structure of C Program.
(OR)
(b) Recall the rules for identifiers. Give suitable example.
- 12.(a) Explain switch statement with an example program.
(OR)
(b) Compare while and do..while statements with suitable examples.
- 13.(a) Discuss about the various String handling functions available in C.
(OR)
(b) Write a C program to calculate the factorial of a given number using Recursive function.
- 14.(a) What is the purpose of Union? Explain and compare Structure and Union.
(OR)
(b) Illustrate the use of pointers with a neat example.
- 15.(a) How to define and open a file? Explain.
(OR)
(b) Write a program that will receive a file name and a line of text as command line argument and write the text in the file.

PART C

5 x 7 = 35

Answer All Questions

(Each answer should not exceed 600 words or three pages)

- 16.(a) Explain the different data types allowed in C Programming.
(OR)
(b) Discuss various Mathematical functions with example.
- 17.(a) How decision making is done using the various forms of if statement? Explain with simple examples.
(OR)
(b) Given two one-dimensional arrays A and B which are sorted in ascending order, merge them into a single array C and arrange the elements of C in ascending order.
- 18.(a) Describe the various categories of functions with simple examples.
(OR)
(b) Write a C program to sort N names in alphabetical order.
- 19.(a) Demonstrate the use of Structures in C with a suitable example.
(OR)
(b) Write a C program using pointers to read an array of integers and display them in reverse order.
- 20.(a) Discuss the various Input and Output operations on Files with suitable examples.
(OR)
(b) Write a C program to compare two files and return 0 if they are equal and 1 if they are not equal.
