

Avinashilingam Institute for Home Science and Higher

Education for women, Coimbatore-641 043

Master's Degree Examination – November 2017

Class: I PG

Max.Marks: 60

Major: Computer Applications

Time: 3 Hours

17MCAC05 Programming in C

Part – A

Choose the Correct Answer

10x ½ =5

- Which of the following rule is/are correct for constructing Integer constants?
 - An integer constant must have at least one digit.
 - It must have a decimal point.
 - It can be either positive or negative.
 - The allowable range for integer constants is -32868 to 32767.
- Which of the following shows the correct hierarchy of arithmetic operations in C?
 - / + * -
 - * - / +
 - + - / *
 - * / + -
- Which of the following answer is correct in this program?

```
void main()
{
float x=3.5, y=4.2;
float Z= (x>y?3.7:2.1);
printf(“%d”,Z);
}
```

 - 3.5
 - 3.7
 - 2.1
 - 4.2
- What does the following declaration mean?

```
int (*a)[10];
```

 - a is array of pointers to 10 integers
 - a is an array of 10 integers
 - a is a pointer to an array of 10 integers
 - a is an pointer to array
- If the two strings are identical, then the strcmp() function returns
 - 1
 - 1
 - 0
 - None of the above
- The keyword used to transfer control from a function back to the calling function is
 - Switch
 - Goto
 - Go back
 - return
- Which of the following is a collection of different data types?
 - String
 - Array
 - Structure
 - Files
- For accessing a structure element using a pointer, you must use
 - Pointer operator(&)
 - Dot operator (.)
 - Pointer operator (*)
 - Arrow operator(->)
- When getc() returns EOF
 - End of files is reached
 - When getc() fails to read a character
 - Both of the above
 - None of the above

10. What is the purpose of "rb" in fopen() function used below in the code?

```
File *fp;
```

```
Fp=fopen("Source.txt","rb");
```

- a) Open "Soure.txt" in binary mode for reading
- b) Open "Soure.txt" in binary mode for reading and writing
- c) Create a new file "Soure.txt" for reading and writing
- d) None of the above

PART – B

5x4 = 20

Answer all the questions

Each answer should not exceed 200 words or one page

11. a) Explain the structure of C program.

Or

b) Discuss evaluation of expressions.

12. a) Explain for loop statement with flow chart and example.

Or

b) Describe about arrays in C.

13. a) Explain how do you declare and initialize string variable?

Or

b) Explain the concept of recursion with examples.

14. a) How to define and declaring structure variable? Explain.

Or

b) Explain pointers and arrays with example.

15. a) Explain the following with example: a) getc(), b) putc(), c) fscanf(), d) fprintf().

Or

b) Illustrate on file opening modes.

PART – C

5x7=35

Answer any three questions

Each answer should not exceed 600 words or one page

16. a) Explain about managing input and output operations in C.

Or

b) Discuss on type conversions in expressions in C.

17. a) Explain the branching statements in C with examples.

Or

b) Explain looping statements in C with examples.

18. a) Explain string handling functions in C.

Or

b) Discuss on various categories of functions with examples.

19. a) Write a detailed note on structures.

Or

b) Discuss on pointers with example program.

20. a) Explain command line arguments in C.

Or

b) Write a C program for file creation and file accessing.