

PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
BCA, Winter 2017 – 18 Examination

Semester: 2
Subject Code: 05101151
Subject Name: Advance C Programming

Date: 08/01/2018
Time: 10:30 am to 1:00 pm
Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Answer the followings.**A. Write short notes.****(05)**

1. What is structure?
2. Define unions?
3. What is recursion?
4. What is function? Write syntax and one example.
5. Define pointers.

B. Multiple choice type questions.(Each of 01 marks)**(10)**

1. In C, parameters are always
 - [A] Passed by value
 - [B] Passed by reference
 - [C] Non-pointer variables are passed by value and pointers are passed by reference
 - [D] Passed by value result
2. Which of the following is true about return type of functions in C?
 - [A] Functions can return any type
 - [B] Functions can return any type except array and functions
 - [C] Functions can return any type except array, functions and union
 - [D] Functions can return any type except array, functions, function pointer and union
3. Which of the following are themselves a collection of different data types?
 - [A] String
 - [B] Structure
 - [C] Char
 - [D] All of the mentioned
4. Which of the following cannot be a structure member?
 - [A] Another structure
 - [B] Function
 - [C] Array
 - [D] None of the mentioned
5. Which of the following is the correct way of declaring a float pointer:
 - [A] float ptr;
 - [B] float *ptr;
 - [C] *float ptr;
 - [D] None of the above
6. Find the output of the following program.

```
void main()
{
    char *msg = "hi";
    printf(msg);
}
```

 - [A] hi
 - [B] h
 - [C] hi followed by garbage value
 - [D] Error
7. Which is valid string function?
 - [A] strpbrk
 - [B] strlen
 - [C] strxfrm
 - [D] strcut
8. Which function reallocates memory?
 - [A] realloc
 - [B] alloc
 - [C] malloc
 - [D] None of these

9. Pointers are of _____.

[A] integer data type

[B] character data type

[C] unsigned integer data types

[D] None of these

10. A Structure

[A] can be read as a single entity

[B] cannot be read as a single entity

[C] can be displayed as a single entity

[D] has member variables that cannot be read individually

Q.2 Answer the followings. (Attempt Any Five)

(15)

1. Explain in brief: Pointers & arrays
2. Write a short note on reading strings from terminal.
3. Explain each and every string handling functions.
4. Write a short note on Declaration of structure.
5. Write a note on file operation?
6. Difference between Union and Structure.

Q.3 Answer the following. (Attempt Any three)

(15)

1. Write a note on structure within structure with suitable example.
2. Describe the uses and limitations of getc and putc.
3. Explain User-Defined Function in detail.
4. Write a program to read the content from text file.

Q.4 Answer the following.

A. Write a program to store the detail of 5 students using structure.

(05)

B. What role does the fseek() plays and how many arguments does it Have? Explain one Example.

(10)

OR

B. Explain Pointer with suitable example. Explain pointer to function in detail.

(10)