[43]

Sardar Patel University
FYBCA (2nd Semester)(NC) External Examination April - 2022
US02CBCA21 || Advanced C Programming
25 April 2022 Monday

Time : 12:00 noon – 02:00 pm   Total : 70

Q.1   Answer the following questions.   **[10]**

1   The parameters used in a function call are called _____ Parameter.
(a)Formal (b) actual (c) local (d) none

2   By default _____ is a return type of a C function.
(a)integer   (b) char (c) float (d) double

3   The following are wrong declaration in function definition. _____
(a) int sum(int a , float d)   (b) float sum(int a ,b)
(c) int sum(int a,int b)   (d) float sum(float a, float aa)

4   Which of the following share a similarity in syntax?
(a) Union   (b) Structure (c) Arrays   (d) Both a &b

5   A _____ is a collection of data items under one name in which the items share the
same storage.
a) Union   (b) Structure (c) Arrays   (d) function

6   Which of the following cannot be a structure member?
(a) Another structure   (b) Function (c) Array   (d) none

7   For the given the declarations , which statement is not valid?
int i;   float f;   int *pd;   float *pf;
(a) pd=pf;   (b) i=5;   (c) pd=&i;   (d) pf=&f;

8   Which of the following is not a C memory allocation function?
(a) malloc()   (b) calloc()   (c) realloc()   (d) alloc()

9   fp= fopen(filename, "r");
Referring to the code above, what is the proper definition for the variable f?
(a) FILE F;   (b) struct file f;   (c) FILE *f;   (d) int f;

10   The mode _____ is used for opening a file for updating.
(a) r   (b) w   (c) a   (d) none

Q.2   Fill in the blanks and True/False.   **[08]**

1   Function which calls itself is known as _____Function.

2   _____operator connects the structure name to its member.

3   _____operator is used with a pointer to access the value of the variable whose
address is contained the pointer.

4   By default, the all file opened are in _____mode.

5   A function definition is also known as Function Implementation. **(True/False)**

6   Size of a structure is determined by size of the Sum of the sizes of all members.
(True/False)

7   Using the free(ptr) free the allocated memory. **(True/False)**

8   When fopen() is not able to open a file, it returns zero. **(True/False)**

C.P. T. O.)

Q.3 Explain following in brief. (Attempt any Ten) [20]

1 List the advantages are functions?
2 Explain recursion in brief
3 Write and explain syntax for function call.
4 Which elements are required for compile time initialization of a structure variable?
5 Write a difference between structure and union.
6 Which are the ways to access structure members?
7 Explain realloc() with example.
8 List benefits of pointer.
9 Give different forms to declare a pointer variable. Which one is preferable?
10 List basic file operations performed on file.
11 Differentiate: printf and fprintf
12 Write down the syntax to open the text file both in read and write mode.

Q.4 **Explain the following in detail. (Attempt any Four)** [32]

1 Explain following categories with syntax and example.
  (1) Passing parameter and No Return Value
  (2) No Passing Parameter and return Value.
2 Explain passing 1-Darray to function with example.
3 Explain array of structure and structure within structure in detail.
4 Explain structure definition and structure initialization with example
5 Explain pointer arithmetic expressions in detail.
6 Explain pointers as function arguments with example.
7 Explain error handling during I/O operations.
8 Explain fopen() , fscanf(), getc(),putw() function with syntax and example.

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