

| Unit-1 | |
|--------|---|
| MCQ | |
| 1 | The parameters used in a function call are called _____. (a) arguments (b) formal (c) actual (d) none |
| 2 | The variable declared inside a function is called _____. (a) global (b) local (c) function (d) none |
| 3 | By default _____ is a return type of a C function. (a) void (b) float (c) int (d) none |
| 4 | In prototype declaration, specifying _____ is optional. (a) return type (b) data type (c) semicolon (d) parameter name |
| 5 | A function which calls itself is known as _____. (a) reverse (b) recursive (c) reserve (d) none |
| 6 | Function header consists of _____ parts. (a) one (b) two (c) three (d) none |
| 7 | A function definition is also known as _____. (a) function implementation (b) function call (c) function type (d) none |
| 8 | The parameter is also known as _____. (a) argument (b) variable (c) data type (d) array |
| 9 | A parameter list in function can be separated by _____. (a) Question marks (?) (b) Commas (,) (c) Exclamatory marks (!) (d) none |
| 10 | A function can be surrounded by _____. (a) parentheses (b) square brackets (c) queerly brackets (d) none |
| 11 | The following are wrong declaration in function definition. _____. (a) int sum(int a , float b) (b) float sum(int a ,float b) (c) int sum(int a,b) (d) float sum(float a, float aa) |
| 12 | A _____ statement that returns the value evaluated by the function. (a) goto (b) break (c) return (d) none |
| 13 | A function declaration is also known as _____. (a) function implementation (b) function call (c) function type (d) function prototype. |
| 14 | If the functions are declare in the global declaration section the prototype is referred as _____ prototyped. (a) global (b) local (c) formal (d) none |

Long Questions

| | |
|----|---|
| 1. | What is User Defined Function? Write advantages of User defined function and also explain function call and function declaration with syntax and example. |
| 2 | Explain Function definition with syntax and example and also explain actual and formal parameters in detail with syntax and example. |
| 3 | Explain following function categories with syntax and example 1. No passing parameters and no return value 2. Passing parameters and Return value |
| 4 | Explain following function categories with syntax and example 1. No Passing parameters and return value 2. Passing parameters and No Return value |
| 5 | Explain passing 1-D array to function with example and also explain recursive function with example. |

Unit-2

MCQ

| | |
|----|--|
| 1 | A _____ is a collection of data items under one name in which the items share the same storage. (a) structure (b) array (c) union (d) none |
| 2 | A _____ is a collection of different data items. (a) structure (b) array (c) char (d) none |
| 3 | The name of a structure is referred to as _____. (a) Label (b) Tag Name (c) Index (d) none |
| 4 | _____ operator connects the structure name to its member. (a) underscore (b) dot (c) ! (d) none |
| 5 | Which of the following cannot be a structure member? (a) Another structure (b) Function (c) Array (d) none |
| 6 | Structure is a _____ data type. (a) built-in (b) derived (c) user defined (d) none |
| 7 | Size of a union is determined by size of the. (a) First member in the union (b) Last member in the union (c) Biggest member in the union (d) Sum of the sizes of all members |
| 8 | Members of a union are accessed as _____. (a) union-name.member (b) union-pointer->member (c) Both a & b (d) none |
| 9 | Which of the following share a similarity in syntax? (a) Union (b) Structure (c) Arrays (d) Both a & b |
| 10 | The variables declared in a structure definition are called as its _____. (a) objects (b) members (c) record (d) none |

| Long Questions | |
|----------------|---|
| 1 | What is structure? Explain structure definition and declaring structure variable with syntax example and also explain how we can access structure members with example. |
| 2 | Explain structure initialization and structure within structure with example. |
| 3 | Explain array of structure and array within structure with example. |
| 4 | Which different methods for transferring structure from one function to another function? Explain any two methods with example. |
| 5 | What is Union? Explain union with syntax and example and also write difference between structure and union |

| UNIT - 3 | |
|----------|---|
| MCQ | |
| 1 | _____ operator is used with a pointer to access the value of the variable whose address is contained in the pointer. (a) address of (b) sizeof (c) indirection (d) member selection |
| 2 | int a, *p = &a; Which of the following statement will not add 1 to a variable? (a) a++; (b) *p=*p+1; (c) (*p)++; (d) *p++; |
| 3 | Given the following declarations: int x; double d; int *p; double *q; Which of the following expression is allowed? (a) p=&x; (b) q=&x; (c) p=&d; (d) p=x; |
| 4 | Which of the following defines a pointer variable to an integer? (a) int &ptr; (b) int **ptr; (c) int &&ptr (d) int *ptr; |
| 5 | Which of the following defines and initializes a pointer to the address of x? (a) int *ptr = *x; (b) int *ptr = &x; (c) int &ptr = *x; (d) int *ptr = ^x; |
| 6 | 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; |
| 7 | Which of the following statements about pointers and arrays is true? (a) The only way to reference data in array is with index operator. (b) The name of the array is a pointer variable. (c) The following expressions are identical when ary is an array: ary and &ary[0] (d) The following expressions are identical when ary is an array: *ary and &ary[0] |
| 8 | Which of the following is not a C memory allocation function? (a) malloc() (b) calloc() (c) realloc() (d) alloc() |
| 9 | If ary is name of an integer array with 10 elements then which of the following statement is false? (a) The two expressions *(ary + 5) and ary[5] are same (b) Name of array ary is a pointer constant to the first element of array. (c) The two expressions ary and &ary[0] are same. (d) If p is an integer pointer variable then p=ary; is invalid statement. |
| 10 | Given a pointer ptr to a structure stu containing a field called name which of the following statements correctly refer name? (a) ptr->name (b) ptr->stu.name (c) ptr.name (d) ptr->stu->name |
| 11 | How will you free the allocated memory? (a) remove(ptr) (b) free(ptr) (c) dealloc(ptr) (d) destroy(ptr) |

Long Questions

- 1 What is pointer? List benefits of pointer and explain declaration, initialization and how can we access a variable through its pointer with syntax and example.
- 2 Explain pointer arithmetic expressions and pointer to an array in detail.
- 3 What is dynamic memory allocation? List and explain dynamic memory allocation function with syntax and example.
- 4 Explain pointers as function arguments with example and also explain function returning multiple values with example.

UNIT-4

MCQ

- 1 `f = 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;
- 2 Which one of the following is valid for opening a file for only reading?
(a) `fileOpen (filenm, "r");` (b) **`fopen (filenm, "r");`**
(c) `fileOpen (filenm, "ra");` (d) `fileOpen (filenm, "read");`
- 3 `putc` function is used to _____
(i) write characters to a file (ii) takes 2 parameters
(iii) returns a character (iv) requires a file pointer
(a) all are true (b) only I and ii are true
(c) all are false (d) **only i,ii and iv are true**
- 4 By default, all the files are opened in _____ mode .
(a) binary (b) **text** (c) octal (d) decimal
- 5 _____ is data type of file pointer.
(a) int (b) double (c) string (d) **FILE**
- 6 `getc()` returns EOF when _____
(a) End of files is reached (b) on error
(c) **both a and b** (d) none of the above
- 7 When `fopen()` is not able to open a file, it returns _____
(a) EOF (b) **NULL** (c) one (d) zero
- 8 The mode _____ is used for opening a file for updating.
(a) r (b) w (c) **a** (d) r+

Unit-4

Long Questions.

1. What is a file? List basic file operations performed on file also list and explain different file modes with example.
- 2 Explain `fopen()` and `fclose()` function with syntax and one suitable program
- 3 Explain `getc()` and `putc()` function with syntax and one suitable program
- 4 Explain `getw()` and `putw()` function with syntax and one suitable program
- 5 Explain `fprintf()` and `fscanf()` with syntax and one suitable program.
- 6 Explain error handling during I/O operations with syntax and one suitable program.