Unit 3

Multiple Choice Questions

1 _____loop execute at least once.
a) while loop b) **do...while** c) if d) for

2 For declaring one- dimensional array _____subscript is use.
1) **One** 2) Two
3) Three 4) All of above

3 Index ualue in array is also called _____
1) Element 2) Number
3) **Subscript** 4) Element and number

4 For declaring two- dimensional array _____subscript is use.
1) One 2) **Two**
3) Three 4) All above

5 In Array subscript can begin with number_____
1) Zero 2) One
3) Three 4) None of these.

6 For Initialization of array list of value separated by _____
1) Question marks (?) **2) Commas (,)**
3) Exclamatory marks (!) 4) None of these

7 An array can be initialize either at compile time or at _____
1) **Run Time** 3) Allocation Time
3) Released Time 4) Not of above

8 '\0' is _____
1) **Null Character** 2) Character value
3) Escape sequence 4) Symbolic Constant

9 In two dimensional array the first subscript is define _____size.
1) **Row** 2) column
3) Vector 4) All of above

10 In two dimensional array the second subscript is define _____size.
1) Row 2) **column**
3) Vector 4) All of above

Short Questions (2 Marks)

1 Explain break and continue statement in C.
2 Explain do-while statement with example.
3 Explain break statement with example.
4 Write difference between break and continue.
5 Write difference between exit and entry controlled loop.
6 What is array? List out the type of array use in c programming.
7 What is an array? Write syntax to declare 1D array in c. also give one example.
8 Write the syntax of compile time initialization of 1D array in c.Also give example.
9 What is an array? Write syntax to declare 2D array in c. also give one example.
10 Explain the gets ( ) function.
11 Explain the puts ( ) function.

Long Questions (4/8 Marks)

1 Explain looping statement with syntax and example.
2 Explain while and for loop with syntax and example.

3 Write difference between do-while, while and for loop.

4 Define 1D array? Explain the declaration and initialization of 1D array with syntax and example.

5 Define 2D array? Explain the declaration and initialization of 2D array with syntax and example.

6. Explain following function with syntax and example.

1. strcmp()
2. strrev()
3. strcpy ()
4. strcat()
5. strlen()

MCQ Based on String :

1 A group of character is known as _____ _____
1) **String** 2) Array
3) Function 4) All of above

2 When we declare string _____data type is use.
1) int 2) **char**
3) float 4) All of above

3 A group of character in string defines in_____quotation marks.
1) Single 2) **Double**
3) Three 4) Multi

4 The _____string function is use to joins two string.
1) **strcat()** 2) strlen()
3) strupr() 4) strrev()

5 strcmp () function is use for _____ two string.
1) Concate 2) Join
3) **Compare** 4) All of above

6 Assign the value of one string into another string _____function is use.
1) **strcpy()** 2) strlen()
3) strupr() 4) strrev()

7 _____ function count and return the number of character in a string.
1) strcpy() 2) **strlen()**
3) strupr() 4) strrev()

1. Which operator is used with a pointer to access the value of the variable whose address is contained in the pointer?

A. Address (&) C. **Indirection (*)**

B. Assignment (=) D. Selection (->)

2. int a, *p = &a;

Which of the following statement will not add 1 to a variable?

A. a++; C. *p = *p + 1;

B. a += 1; 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;** C. q = &x;

B. p = &d; D. p = x;

4. Which of the following defines a pointer variable to an integer?

A. int &ptr; C. int **ptr;

B. **int *ptr;** D. int &&ptr;

5. Which of the following defines and initializes a pointer to the address of x?

A. int *ptr = *x; C. **int *ptr = &x;**

B. int &ptr = *x; D. int *ptr = ^x;

6. Pointers to pointers is a term used to describe

A. Any two pointers that point to the same variable

B. Any two pointers that point to variables of the same type

C. Pointers used as formal parameters in a function header

D. **Pointers whose contents are the address of another pointer**

7. Given the definitions shown below, which answer is not valid?

int i; float f; int *pd; float *pf;

A. **pd = pf;** C. i = 5;

B. pd = &i; D. pf = &f;

8. Which of the following is invalid? If p1 and p2 are properly declared and initialized.

A. x= *p1 * *p2; C. p1++;

B. x= p/3 ; D. p2 - p1;

9. Which of the following is valid ? If p1 and p2 are properly declared and initialized.

A. p1/p2 C. p1 + p2

B. p1 * p2 D. p1 / 3

10. malloc() function sets the initial value in memory as

A. zero C. garbage

B. NULL D. None of these

11. If a is declared as integer, which of the following statement is false?

A. The expression *&a and a are the same.

B. **The expression *&a and &*a are the same.**

C. The expression int *p = &a is valid.

D. printf("%d",*&a); will print value of a.

12. Which of the following is not a C memory allocation function?

A.	malloc()	C.	calloc()
B.	realloc()	D.	**alloc()**

13. Indicate which of the following function call that return multiple values through pointer.

A. j = sum (&i, &j); C. **i = sum (10,34);**

B. i = sum (i, &j); D. j= sum (pi, pj);

14. Which of the following pointer expression is not wrong?

A. y = *p1 * * p2;

B. Comparison like: p1>p2, p1==p2, and p1! =p2

C. sum+=*p2;

D. ***z =5* - *p2 / *p1;***

Short Questions unit 4

1. Define: indirection operator, pointer variable
2. Give the concept of pointers to array.
3. Differentiate between '*' and '&' operators in pointers.
4. Explain free() function.
5. Differentiate malloc() and calloc().
6. Explain how compile time and runtime memory allocation process differ?
7. Differentiate: a pointer and a pointer variable
8. List out 4 benefits of pointers.
9. List different pointer declaration style. Which one is preferable?
10. What is scale factor? Explain with example in brief.

Long Questions

1. Define pointer variable. How can we declare and initialize pointer variable? How can we access value of variable through pointer type variable?
2. What are pointers? How can they be used with arrays? Explain pointer to an array using appropriate examples.
3. Explain the importance of pointers in functions by taking suitable example. How pointers can be used to return multiple values to functions?
4. Write a note on Dynamic memory allocation.
5. Explain pointer arithmetic with example.
6. Write note on: pointer to pointer