

# UNIT 1

Ques 1) What is algorithm .Write an algorithm for converting temperature Fahrenheit into Celsius.

Ques 2) Write an algorithm for sum of digit.

Ques 3) Define flowchart and discuss all the symbols related to flowchart.

Ques 4) Draw a flowchart for printing the largest number among three numbers.

Ques 5) Draw a flowchart to printing the table of a number.

Ques 6) Define tokens, Identifiers, keywords, constant and variables.

Ques 7) What do you mean by declaration of variable explain with example.

Ques 8) What do you mean by initialization of variable explain with example.

Ques 9) What do you mean by data types and define all the types of data types like short ,long, unsigned, signed.

Ques 10) What are the different types of operators are available in C.

Ques 11)What do you mean by unary, binary and ternary operator name them.

Ques 12) What do you do you understand by Operator Precedence and Associativity.

Ques 13)What will be the result of  $b = 6.6/a + 2*n$ ; where  $a=2$  and  $n=3$ .

Ques 14)What are the rules for evaluation for expression.

Ques 15) What are the basic difference between post and pre increment or decrement.

Ques 16) What do you understand by shorthand assignment operator explain with example.

Ques 17) Which are the operators will always yields result true or false explain them.

Ques 18) Expalin printf() and scanf() fucntions?

Ques 19) What do you understand by format specifier and list all the format specifier of all the data types.

Ques 20) What do you understand by conditional operator.

Ques 21) What do you understand by Special operators.

Ques 22)What do you mean by Logical operators

Ques 23)What do you mean by integer arithmetic expression.

## UNIT 2

Ques 1) What do you understand by Two way selection statement explain all of them.

Ques 2) What do you understand by loop and explain all of them.

Ques 3) What are the difference between for ,while and do-while loop.

Ques 4)WAP to find the greatest of the three numbers entered through the keyboard using conditional operators.

Ques 5)WAP using conditional operator to determine whether a year entered through the keyboard is a leap year or not.

Ques 6) If the three sides of a triangle are entered through the keyboard Write a program to check whether the triangle is valid or not. The triangle is valid if the sum of two sides is greater than the largest of the three sides.

Ques 7) Write a program to print all the ASCII values and their equivalent characters using while loop. The ASCII values vary from 0 to 255.

Ques 8) Write a program to print out all Armstrong numbers between 1 and 500. For example, Armstrong no  $153=(1*1*1)+(5*5*5)+(3*3*3)$ .

Ques 9) Write a program to add first 10 terms of the following series using a for loop  
 $S= 1/1! + 2/2! + 3/3! + \dots \dots \dots 10/10!$

Ques 10) Write a program to input a number and check whether the number is prime or not.

Ques 11)Write a menu driven program which has following options :

- 1)Factorial of a number
- 2)Prime or not
- 3)Odd or even
- 4)Exit

Once a menu item is selected the appropriate action should be taken and once this action is finished, the menu should reappear. Unless the user selects the "Exit " option or user does not want to continue.

**Ques12) Write a program to print the following pattern**

*	*****	*	*****	*	1	A
**	****	**	****	**	12	AB
***	***	***	***	***	123	ABC
****	**	****	**	*****	1234	ABCD
*****	*	*****	*	*****	12345	ABCDE

**Ques 13) Expalin break,continue and goto statements.**

### UNIT 3

**Ques 1) What do you mean by function ? Expalin.**

**Ques 2)What are the difference between Call by Value and Call by Reference explain with the help of program.**

**Ques 3) Write a function to calculate the factorial value of any integer entered by the keyboard.**

**Ques 4)Write a function power(a,b) to calculate the value of a raised to the power b.**

**Ques 5)Write a function to compute the greatest common divisor given by Euclid’s algorithm.**

**Ques 6) Write a recursive function to obtain the sum of first 25 natural numbers.**

**Ques 7) Write a recursive function to calculate the sum of digits of any number.**

**Ques 8) What is an array? Explain initialization and decalration of one dimensional array.**

**Ques 9)Write a program to copy the contents of one array into another in the reverse order.**

**Ques 10) Write a program to input 10 elements in an array and print the largest and the smallest elements in the array.**

**Ques 11) Write a program to input A matrix 4 X 4 and find out the largest and the smallest element indexes in the array for example if largest element is at the position at a[1][3] then Output will be [1][3].**

**Ques 12) Write a program to find if a square matrix is symmetric.**

**Ques 13) Write a program to obtain transpose of a 4x4 matrix.**

**Ques 14) Write a program to input two matrices of 3x3 A and B and print the multiplication of matrix.**

**Ques 15) Write a program to input two matrices of 3x3 A and B and print the addition and subtraction of matrix.**

**Ques 16) What do you understand by Searching. WAP to input 10 elements in an array and find out the inputted element is present in the array or not.**

**Ques 17) Write a program to input 10 elements in an array and print the sorted result in ascending order with the help of any sorting.**

**Ques 18) Explain any sorting with the help of program.**

**Ques 19) Write a program that converts a number into string like 124 into one hundred and four.**

**Ques 20) Write a program to sort a set of names stored in an array in alphabetical order.**

**Ques 21) Explain `strlen()`, `strcpy()`, `strcat()`, `strcmp()`, `strlwr()`, `strupr()`, `strrev()`.**

**Ques 22) Write a program to input two strings and print the concatenation of the two strings using `strcat()`.**

**Ques 23) Write a program to input a string and calculate and print the length of the string without using `strlen()`.**

## **UNIT 4**

**Ques 1) What do you mean by structure? Explain how to declare and initialize structure.**

**Ques 2) What do you mean by array of structures? Explain with example.**

**Ques 3) How to pass structure in function.**

**Ques 4) Create a structure to specify data of 100 books that contains the information of book (name, pages, price). Write a program to input the information and print the information of 100 books.**

**Ques 5) Create a structure of an employee that contains the name, address, age, salary . Write a program to input the information and print the information of 100 employees and also print the the total salary of all the employees.**

**Ques 6) Write a program to read a file and display its contents.**

**Ques 7) Write a program that will read a file and count how many characters, spaces, tabs and newlines are present in it.**

**Ques 8) Write a program that will open the file and takes the contents of a file and copies them into another file character by character.**

**Ques 9) Write a program that will open the file and that writes string to a file using the function fputs().**

**Ques 10) Write a program that will open the file and with the use of structures it will write the records of employees.**

**Ques11) Write a program that will open the file and display and read the employee records of a file.**

**Ques 12) Define fopen( ), fread( ), fprintf( ) and fscanf( ).**

## **UNIT 5**

**Ques 1) Describe dynamic memory allocation, explain malloc(), calloc(), realloc(), and free().**

**Ques 2) Define stack and Queue.**

**Ques 3) What do understand by Linked list.**

**Ques 4) What are the different ways of insertion of a node in a linked list explain each of them.**

**Ques 5) What are the different ways of deletion of a node in a linked list explain each of them.**

**Ques 6) What do you understand by C Preprocessor and also explain file inclusion, macro expansion and conditional compilation with the help of program.**

**Ques 7) Write a macro definition with arguments for calculation of area and perimeter of a triangle, a square and a circle. Store these macro definitions in a file called "areaperi.h". Include this file in your program, and call the macro definitions for calculating area and perimeter for different squares, triangles and circles.**

**Ques 8) Write macro definition with arguments for calculation of simple interest and amount. Store these macro definition in a file called "interest.h". Include this file in your program, and call the macro definitions for calculating simple interest and amount.**

**Ques 9) What do you mean by pointer? Explain how to declare and initialize pointer variable.**

**Ques 10) What do you data structures?**

**Ques 11) Explain primitive and non primitive data types?**