# QUESTION BANK

## MODULE I

### INTRODUCTION TO C LANGUAGE

1. Explain the input & output statements with examples. (**JULY 2014, JUN/JULY 2015)**

2. Draw the structure of a C-program & explain in brief.**(DEC/JAN 2014, JULY 2014, JAN 2015)**

3. Explain the different phases of solving a given problem using computer. **(JUN/JULY 2013)**

4. What are tokens? Explain the various types of tokens with example. **(JUN/JULY 2013,JAN 2014,JUN/JULY 2015)**

5. Explain software development life cycle. **(JUN/JULY 2013)**

6. What are identifiers? Discuss the rules to be followed while naming identifiers. Give Examples. **(JUN/JULY 2013)**

7. Explain format specifiers used in scanf ( ) function to read int, float, char, double and Longint datatypes. **(JUNE/JULY 2013)**

8. Explain different datatypes available in C **(DEC /JAN 2014, JUN/JULY 2015)**

9.Explain precedence and associativity of operators in C with example **(JUN/JULY2013, JAN 2015)**

10**.** What is type conversion? What are the different ways of type conversion? Explain with an example. **(JUN/JULY 2013, JAN 2015)**

11**.** Write C program to swap values of two integers without using third variable. **(JUN/JULY2013)**

12. Find the result of each of the following expressions with i=4, j=2, k=6, a=2.
i) k*=i+j ii) j=j/=k iii) i%=i/3 iv) m= i+(j=2+k) v) a=i*(j/=k/2) **(JUN/JULY 2013)**

13**.** Explain relational operators in C,with examples. **(JAN 2014, JULY 2014, JAN 2015,JUN/JULY 2015)**

14. Explain bitwise operators in C**.( JAN2014,JULY 2014,JUN/JULY 2015)**

15. Explain unary operators in C**. (JAN 2014).**

16. Write a c program which takes as input p,t,r compute simple interest and display the result**(JUNE/JULY 2015).**

# MODULE II

## BRANCHING AND LOOPING

1. List the different decision making statements. Explain any 2 with their syntax & example **(JUN/JULY2013,JAN 2015,JUN/JULY 2015).**

2. Write the c-code to find the factorial of a number with all the looping statements**. (JAN2014)**

3. Explain the use of break & continue statements**. (JAN 2014)**

4. Differentiate between while and do-while statements, with an example for each. **(JUN/JULY 2013, JUN/JULY 2015)**

5. Write a 'C' program to calculate area of circle, rectangle and triangle using switch statement. Area of circle = $\pi * r * r$ Area of rectangle = length * breadth, Area of triangle = 0.5*base*height. **(JUN/JULY 2013)**

6. Write a C Program to find roots of Quadratic equation. Consider all possible cases of roots (**JUN /JULY 2014.JAN 2015)**

7. Differentiate pre-test and post-test loops. Illustrate your answer with suitable example. **(JUN /JULY 2013, JAN 2015)**

8. Explain declration and syntax of while and do while loop **(DEC/JAN 2014,JUN/JULY2015).**

9. Explain switch statement. **(JULY 2014).**

# MODULE III

## ARRAYS, STRINGS AND FUNCTIONS

1. Write a C-program to find GCD of two numbers. **(JAN 2014)**

2. Write a 'C' program using function, to compute the sum of N numbers. **(JUN/JULY 2013)**

3. Describe the different ways of passing parameters to a function? **(JUN/JULY 2013, JAN 2014, JAN 2015)**

4 **.**What is formatted output? Explain output of integer & real no using an example for each. **(JUN/JULY 2013)**

5. Write C program to print n fibonacci numbers using function. **(JAN 2013, JAN 2014)**

6. Differentiate call by value and call by address. **(JUN/JULY 2013,JAN 2015)**

7. Explain scope of local and global variables with sample example **(JUNE/JULY 2013)**

8**.** What is a function? Describe with declaration syntax **(DEC/JAN 2014/JAN 2015).**

9. Explain different function designs. **(JULY 2014).**

10**.** Explain the declaration & initialization of 1-dimensional array, with an example**. (JUN/JULY 2013, JULY 2014, JAN2015)**

11**.** Explain the initialization & declaration of C –strings. **(JULY 2014, JAN 2015)**

12**.** Write a C-program to read an array of size 'N' & print the array elements**. (JAN 2014)**

13. What is an array? Write a program to print the sum of the two dimensional array and store the result into another array. **(JAN 2014/JAN 2015)**

14**.** Write a program that accepts a string and checks string is palindrome or not. **(JAN 2014, JUN/JULY 2015)**

15. Write a C program to search an element from unsorted list using binary search. **(JUN/JULY 2013)**

## MODULE 1V

## STRUCTURES AND FILE MANAGEMENT

1. What is structure data type? Explain **(JAN 2015,JUN/JULY 2015)**

2. Show how a structure variable is passed as a parameter to a function with an example **(JAN 2015)**

3. Explain the concept array of structures with a suitable C program (**JAN 2015**)

4. What is file? Explain fopen() , fclose() functions (**JAN 2015**)

5. Explain how the input is accepted from a file and displayed (**JAN 2015**)

6. Explain typedefined structure. (**JUN/JULY 2015**).

7. Write a c program to input the following details of N students using structure:
   ROLL no: integer, name: string, marks: float, grade: char
   Print the names of the students with marks>=70.0% (**JUN/JULY 2015**).

## MODULE V

## POINTERS AND PREPROCESSORS

1. What is a pointer? Write a program in C to find the sum and mean of all elements in an array. Use pointer technology (**JAN 2015,JUN/JULY 2015)**

2. What is preprocessor directive? Explain #define and # include preprocessor directive**(JAN 2015**)

3. Explain a) Dynamic memory allocation
   b) Malloc() function **(JAN 2015,JUN/JULY 2015)**

4. What are premetive and non primitive data types (**JAN 2015,JUN/JULY 2015**)

5. Define Queue .Explain along with its application (**JAN 2015**)

6. Explain (**JAN 2015,JUN/JULY 2015**)
   1) Abstract data type
   2) Stack
   3) Linked list