

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to check whether given character is vowel or consonant. [10 Marks]

Q2) Write C Program to accept two-dimensional matrix and display transpose of matrix. [20 Marks]

OR

Q2) Write C Program to print the following pattern:

A B C D E

A B C D

A B C

A B

A

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to check given number is positive or negative using ternary operator. [10 Marks]

Q2) Write C Program to find result of following series:

$(x - 1) + (x - 2) + (x - 3) + (x - 4) + \dots + (x - n)$ [20 Marks]

OR

Q2) Write C Program to convert decimal number into binary.[20 Marks]

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
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Q1) Write C Program to find roots of quadratic equation Ax^2+Bx+C . [10 Marks]

Q2) Write C Program to find maximum and minimum number of input matrix. [20 Marks]

OR

Q2) Write C Program to print the following pattern:

```
*  
  
*   *  
  
*   *   *
```

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Maximum Marks: 35

Q1) Accept a character from user and whether it is in uppercase or lowercase. [10 Marks]

Q2) Write a program to find the intersection of the two integer arrays. [20 Marks]

OR

Q2) Write C Program to find and store square of each element of one matrix into other matrix.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Maximum Marks: 35

Q1) Write a 'C' program to accept a number and display the first ten multiples of that number.

[10 Marks]

Q2) Write C Program to display addition of two matrices.

[20 Marks]

OR

Q2) Write a menu driven program to perform the following operations on a character type variable without using standard library functions

i. Convert it to uppercase

ii. Convert it to lowercase

Q3) Viva

[5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to input week number (1-7) and print day of week name using switch case. [10 Marks]

Q2) Write user defined function to sort an input array in descending order. [20 Marks]

OR

Q2) Write C program to find multiplication of two matrices.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Maximum Marks: 35

Q1) Write a C program to find volume of sphere. [10 Marks]

Q2) Write C Program to find minimum and maximum from given input matrix. [20 Marks]

OR

Q2) Write C Program to copy all elements of one array into another array using function.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to find average of 4 numbers. [10 Marks]

Q2) Write C Program to print Fibonacci Series using Recursion. [20 Marks]

OR

Q2) Write C Program to convert number into words.
(Example: 2-two, 23 two three , 234 – two three four)

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to check given number is even or odd using ternary operator. [10 Marks]

Q2) Write a menu driven C Program to perform following operations on given number N:

1. Find sum of first N numbers
2. Find sum of first and last digit of number N

[20 Marks]

OR

Q2) Write user defined function count_zero (int[][],int) which will count all zeros of input matrix.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to input week number (1-7) and print day of week name using switch case. [10 Marks]

Q2) Write C Program to check given number is Perfect number or not. [20 Marks]

OR

Q2) Write C Program to count total number of digits, even digits and odd digits in given number.
(Example: If number=418 then output will be total digits =3, total odd digit(s) =1 and total even digit(s) =2)

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to display ASCII value of vowels.

[10 Marks]

Q2) Write C Program to convert decimal to octal number.

[20 Marks]

OR

Q2) Accept two numbers in variable x and y from user and perform the following operations.

Options	Actions
1. Equality	Check if x is equal to y.
2. Less Than	Check if x is less than y.
3. Range	Display all numbers between x and y.
4. Swap	Interchange x and y.

Q3) Viva

[5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Maximum Marks: 35

Q1) Write C Program to display first n numbers in reverse order. [10 Marks]

Q2) Write a program to accept characters from the user and count total alphabet and digit till the user enters '\$'. [20 Marks]

OR

Q2) Write user defined function max_ele (int [][],int) to find maximum number of input matrix.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Accept two numbers X, Y from the user and find their integer division, exact division and remainder. [10 Marks]

Q2) Write a program to accept a matrix A of size mXn and display sum of elements of each row. [20 Marks]

OR

Q2) Write a menu driven program to perform the following operations on an integer array.

- i. Display the count and sum of even elements.
- ii. Display the count and sum of odd elements.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to accept character from a keyboard and display its previous and next character in order. [10 Marks]

Q.2) Write C Program to check if the accepted number is prime or not. [20 Marks]

OR

Accept two numbers m & n from the user and display all those numbers between m & n which are divisible by 3 but not by 4.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write a program to accept integer and check if it is even or odd. [10 Marks]

Q2) Write C Program to calculate sum of digits of given number. [20 Marks]

OR

Q2) Write a function void swap(int *, int *) to interchange the values of two variables and display the values of variables before and after swapping.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to accept a character is input and check whether it is digit, lowercase alphabet, uppercase alphabet or special symbol. [10 Marks]

Q2) Write user defined function is_perfect (int) to check given number is perfect number or not. [20 Marks]

OR

Q2) Write a C program to accept an array of 5 numbers, store the squares of these numbers in another array and display it.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Maximum Marks: 35

Q1) Accept three numbers from users and display the greatest number among them. [10 Marks]

Q2) Write a menu-driven program to calculate the following:

- i. Area of circle
- ii. Area of square
- iii. Exit

[20 Marks]

OR

Q2) Write C Program to check a number is Armstrong or not

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write a program to accept a number and check if is divisible by 5 and 7. [10 Marks]

Q2) Write C Program to read n integers in an array. Display the alternate elements of that array. [20Marks]

OR

Q2) Write a function to display Fibonacci series upto number n.

Q3) Viva [05 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to display first n numbers in reverse order. [10 Marks]

Q2) Accept x and y coordinates of two points and write a menu driven program to perform the following operations :

i. Distance between points.

ii. Check whether they lie in the same quadrant. [20 Marks]

OR

Q2) Write a function void swap(int *, int *) to interchange the values of two variables and display the values of variables before and after swapping.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write a C program to read an integer and display the message as “Positive Number”, “Negative Number” or “Zero Value” depending on the value of the given number. Use ternary operator. [10 Marks]

Q2) Write a C program to display the sum of both the diagonal elements of a matrix. [20 Marks]

OR

Q2) Write a function all_factors (int) which displays all divisors of passed number.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write a 'C' program to accept the values of two sides of a shape. Check whether it is a square or rectangle. Display its area. [10 Marks]

Q2) Write a 'C' program to read 'n' integers in an array. Display alternate elements of that array. [20 Marks]

OR

Q2) Write a function swap(int, int) that will interchange the value of given two integers. Print the value before and after the swap in main function.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write a 'C' program to accept any alphabet. Change its case and display the changed case. [10 Marks]

Q2) Write a 'C' program to accept 10 integers in an array. Display only the even integers from the array. [20 Marks]

OR

Q2) Write a C program to print Fibonacci Series using recursion.

Q3) Viva [5 Marks]

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Maximum Marks: 35

Q1) Write a 'C' program to accept an integer. Display its square on the first line. Cube on the second line and square root on the third line. [10 Marks]

Q2) Write C Program to find result of following series:

$(x - 1) + (x - 2) + (x - 3) + (x - 4) + \dots + (x - n)$ [20 Marks]

OR

Q2) Write a menu driven program to perform the following operations on an integer array of 10 elements:

- i. Display the sum of elements at even subscript positions of the array
- ii. Display the sum of elements at odd subscript positions of the array

Q3) Viva [5 Marks]

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Maximum Marks: 35

Q1) Write a 'C' program to check whether a given character is a VOWEL or CONSONANT using switch-case statement. [10 Marks]

Q2) Write C Program to convert number into words. [20 Marks]
(eg 2-two, 23 two three , 234 – two three four)

OR

Q2) Write a menu driven program, accept two numbers and perform following options:

1. GCD of a number
2. LCM of a number

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write a 'C' program to display the first ten multiples of given number. [10 Marks]

Q2) Write a 'C' program to reverse given number. [20 Marks]

OR

Q2) Accept two numbers m & n and display all prime numbers between m & n.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to accept year and check whether year is leap year or not. [10 Marks]

Q2) Write a C program to accept an array of 5 numbers, store the squares of these numbers in another array and display it. [20 Marks]

OR

Q2) Write a menu driven program to perform the following operations on given number.

- i. Display its factorial
- ii. Check even or odd
- iii. Exit

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
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Duration: 3 Hours

Maximum Marks: 35

Q1) Write C Program to display ASCII value of vowels. [10 Marks]

Q2) Write a recursive C function to calculate x^y . (Do not use standard library function). [20 Marks]

OR

Q2) Write a program to find the intersection of the two integer arrays.

Q3) Viva [5 Marks]

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Maximum Marks: 35

Q1) Write a 'C' program to check whether a given character is a VOWEL or CONSONANT using switch-case statement. [10 Marks]

Q2) Write C Program to accept two dimensional matrix and display transpose of matrix. [20 Marks]

OR

Q2) Write a function for Search, which accepts an array of n elements and a key as parameters and return the position of key in the array and -1 if the key is not found. Accept 'n' numbers from the user, store them in an array. Accept the key to be searched and search it using this function.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write 'C' program to accept a number from user and display its table. [10 Marks]

Q2) Accept x and y coordinates of two points and write a menu driven program to perform the following operations till the user selects Exit.

- i. Distance between points.
- ii. Check whether they lie in the same quadrant.
- iii. EXIT

[20 Marks]

OR

Q2) Write a function READ(int [],int) to accept 'n' integers in an array. Display the array elements. Also find their sum and average.

Q3) Viva [5 Marks]

F.Y.B.C.A. (Science) Practical Examination
Lab Course 116 SEM I
C Programming Laboratory

Duration: 3 Hours

Maximum Marks: 35

Q1) Write a 'C' program to accept an integer. Display its square on the first line. Cube on the second line and square root on the third line. [10 Marks]

Q2) Write C Program to convert decimal to binary. [20 Marks]

OR

Q2) Write a function that accepts a character as parameter and returns 1 if it is an alphabet, 2 if it is a digit. In main, accept characters till the user enters '\$' and use the function to count the total number of alphabets and digits entered.

Q3) Viva [5 Marks]