KADI SARVA VISHWAVIDHYALAYA

B.E Semester-1 Examination (Branch Name) Month 2023

Subject Code: CC103-N

Subject Name: FUNDAMENTAL OF PROGRAMMING

Date: 30\12\2023   Time: 12:00 PM to 03:00 PM   Total Marks: 70

Instructions:
1. Answer each section in separate answer sheet.
2. Use of scientific calculator is permitted.
3. All questions are Compulsory.
4. Indicate clearly, the option you attempt along with its respective question number.
5. Use the last page of main supplementary for rough work.

Section-I

Q-1 (A) What is a computer? Draw and explain block diagram of computer in detail. [5]
    (B) List out operators used in C language and explain any two with example. [5]
    (C) Assume that you want to make sum of 1 to 100. Write a C program to perform the same using (1) While loop (2) Do-while loop. [5]

OR

    (C) Write a C program for simple calculator (+, -, *, /, %) using switch-case statement. [5]

Q-2 (A) Draw and explain structure of a C program. [5]
    (B) Write a C program to compute the series $1! + 2! + 3! + ... + n!$, read value of n from the user. [5]

OR

Q-2 (A) Write the syntax of else_if ladder and explain with example. [5]
    (B) Draw the flowchart write a C program to find the sum of all integers greater than 100 and less than 200 that are divisible by 7. [5]

Q-3 (A) Write a C program to copy string without using strcpy() function. [5]
    (B) What is data type? List all types of data type available in C and state the rules to define identifier. [5]

OR

Q-3 (A) Write a C program to reverse the string without using inbuilt function. [5]
    (B) 1. Explain scope and life time of variable. [5]
        2. What do you mean by recursive function? Explain with small example.

Section-II

Q-4 (A) What is string? Explain any two string handling functions with syntax and example. [5]
    (B) Write a C program to read 10 numbers from user and store them in an array. Display Sum, Minimum and Average of the numbers. [5]
    (C) Explain the function definition, function prototype and function call with relative example. [5]

OR

    (C) Explain one dimensional array, two dimensional array and multi-dimensional array with their syntax and example. [5]

Q-5 (A) Write a program using structure to get name, roll number, and marks of a student's of a class and find out who got highest marks. [5]

(B) Explain the use of pointer in C programming. How to declare and initialize pointer in C. [5]

OR

Q-5 (A) Write a C program to display following output using for loop. [5]

```
1
2 1
3 2 1
4 3 2 1
5 4 3 2 1
```

(B) What is structure? Explain structure within structure with example.

Q-6 (A) Explain the following File Handling functions: [5]
1. fseek( )
2. ftell( )
3. fread( )
4. fwrite( )
5. fscanf( )

(B) Explain call by value and call by reference with example. [5]

OR

Q-6 (A) Explain implicit and explicit type conversion with example. [5]

(B) Write a program to read a matrix of size m*n and print its transpose. [5]

KADI SARVA VISHWAVIDYALAYA
B.E. Semester-I Examination (June-2023)

SUBJECT CODE: CC103-N

SUBJECT NAME: Fundamental of Programming

DATE: 19/06/2023

TIME: 10:00AM to 1:00PM

TOTAL MARKS: 70

Instructions:
1. Answer each section in a separate Answer Sheet.
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly, the options you attempted along with its respective question number.
5. Use the last page of the main supplementary for rough work.

SECTION – 1

Q-1.	a)	Define (i) Compiler (ii) Interpreter (iii) Assembler. And explain types of programming languages.	5
	b)	Explain the structure of C program give an example.	5
	c)	Compare interpreter and compiler.	5
		OR	
	c)	Write a program to find average of three numbers.	5

Q-2.	a)	Explain increment, decrement and sizeof() operators in C with examples of each.	5
	b)	Write a program to find maximum and minimum numbers from four numbers by using nested if-else statement.	5
		OR	
Q-2.	a)	Explain recursive function with example.	5
	b)	Write a program and draw the flowchart for a program to print the following	5

```
4 3 2 1
3 2 1
2 1
1
```

Q-3.	a)	Explain Machine Language , Assembly Language and High level Language	5
	b)	Write a program to check whether the entered number is prime or not.	5
		OR	
Q-3.	a)	Explain scope and lifetime of a variable in detail.	5
	b)	Explain operator precedence and associatively.	5

Subject code: CC103-N
Subject Name: FUNDAMENTALS OF PROGRAMMING
Branch: B.E (All) Date: 07/12/2023

Total Marks: 30
SEM: 1st
Time: 9:15 to 10:45

Que:1 (a) Draw and explain block diagram of computer system. 05

(b) Explain system software and application software. 05

Que:2 (a) What is algorithm? Write an algorithm to find factorial of given number. 05

(b) Write a program to perform average of four variables. 05

OR

Que:2 (a) Write a program to swap the values of two variables. 05

(b) Write a program to get maximum number among three. 05

Que:3 (a) Explain different types of looping system. 05

(b) Write a program to find reverse of given number. 05

OR

Que:3 (a) Write a program to print 1 to 5 numbers using array. 05

(b) Write a program to compare two strings. 05

KADI SARVA VISHWAVIDYALAYA

B.E. Semester-I Examination (Febuary-2022)

SUBJECT CODE: CC103-N
DATE: 10/02/22
TOTAL MARKS: 70

SUBJECT NAME: Fundamental of Programing
TIME: 12:30 pm to 3:30 pm

Instructions:
1. Answer each section in separate Answer Sheet.
2. Use of scientific Calculator is permitted.
3. All questions are compulsory.
4. Indicate clearly, the options you attempted along with its respective question number.
5. Use the last page of main supplementary for rough work.

SECTION – 1

Q-1. a) Explain types of programming languages. Differentiate between compiler and interpreter.   **5**

b) Differentiate between Algorithm and Flowchart. Draw a flowchart to print the smallest digit among three integer digits.   **5**

c) What is variable and constant in C? Explain them with the help of example.   **5**

OR

c) Draw a block diagram of computer system and explain it.   **5**

Q-2. a) Explain arithmetic, logical operator and relational operator used in C language.   **5**

b) What is type conversion? Explain implicit type conversion and explicit type conversion with example.   **5**

OR

Q-2. a) Distinguish between the following pairs: **5**
    (1) "getchar" and "scanf" functions.
    (2) "%s" and "%c" specifications for reading.

b) State the different types of If statement and explain any one with proper example.   **5**

Q-3. a) What is String? Explain any three string handling functions in C.   **5**

b) Write a C program to display the following triangle for N lines.   **5**

```
    1
  A  B
 1 2 3
A B C D
1 2 3 4 5
```

Λ

OR

Q-3. **a)** Write a program to check whether a given string is palindrome or not. 5

b) What is Array in C language? State advantages and disadvantages of Array. 5

SECTION – 2

Q-4. **a)** Write a program to display transpose of given 3*3 matrix. 5

b) Explain following operators used in C language. 1) Increment 2) Decrement 3) Bitwise. 5

c) Write a C program to store information (Name, Roll No., and Marks) of 10 students using structure and display in proper format. 5

OR

c) Write C function to print factorial of number between 1 to 20. 5

Q-5. **a)** Describe types of function based on arguments and return type. 5

b) Explain nested structure and array of structure with example. 5

OR

Q-5. **a)** What is user-defined function? Explain Actual argument and Formal argument. 5

b) What is array of pointers? How it's declared and explain in brief. 5

Q-6. **a)** Describe file management? List the various file handling operations in c. 5

b) What is the purpose of switch statement? Explain its syntax with an example. 5

OR

Q-6. **a)** Difference between Structures and Unions. 5

b) Write a program to find out sum of 6 elements of array using pointer. 5

******BEST OF LUCK******