SET ‘A’

Group A

1. What is an array? How one-dimensional array can be passed as a function argument? Write a program to arrange an array having 10 integer numbers in ascending order using function.

2. Define function and list its advantages. Difference between passing arguments by value and passing arguments by address with suitable programs.

3. What is loop? Explain different types of loop along with its syntax and suitable examples. Write a program to display the Floyd's Triangle.

```
1
2 3
4 5 6
7 8 9 10
```

Group B

4. What do you mean by operator associativity in C? Explain Logical and relational operator.

5. What do you mean by problem analysis? Explain the Compilation and Execution of any C program.

6. Define nested if else statement with suitable flowchart. Write a C code to check if user given input is exactly divisible by 5 or 11 using nested if else statement.

7. "Size of character array is always declared one more than the input size." Justify the statement. Write a program to read a character array input as "TRIBHUVAN UNIVERSITY" from the user and find out how many times a character 'I' occurs in the array?

8. What is operator associativity? Find out the value of ther variable a in each step below:
Int i=1, j=5, k=9;
Float a=1.5, b=2.5, c=4.5;

- a=c-i/j+c/k;
- a=(c-i)/k+(j+b)/j;
- a=c+k%2+b;
- a=(b+4)%(c+2);

9. Write the syntax of switch statement. Write a program to sum of digits of an unsigned integer using while loop.

10. Wite syntax to declare and initialize 2-dimensional array? Write a program to add any two 3*3 matrices.

11. Explain if else statement with syntax and semantic. Write a program to read cost price and selling price of a good and find profit or loss amount.

12. Explain standard I/O functions. Give examples to use puts (), gets () and scanf() functions.

Set 'B'

Group A

1. What is an algorithm? What are variables and identifiers? Write a program to find reverse of a n digit number.
2. Explain primary data types in C with their corresponding range. Describe the basic structure of C program with suitable example.
3. What do you mean by operator associativity? Explain different types of operators in C with suitable example.

Group B

4. explain the switch statement with suitable example.
5. What is loop? Differentiate while and do while loop with suitable example.
6. Differentiate between Constants and Keywords. Write a program to check whether a number entered by user is Armstrong number or not.
7. What is flowchart? List different symbols used in flowchart. Draw a flowchart to print first 10 even numbers.
8. Define nested if ese statement with suitable flowchart. Write a program to check whether a number is divisibie by 7 or 11 using nested if else statement.
9. Explain logical operators with truth table. Write a program to compute sum of square.
10. Why we need different data types? Explain basic data types in C with its range of values.
11. Write a program to display first 10 prime numbers.
12. Find out and correct errors in the following code:

```
int main()
{
char d,i;
char name[7] = "Program";
while(name[i]==’/0'):
}
d=Conv(name[i]);
i++;
printf("%c, &d”);
}
return 0;
}
```