

**TNU- BCA 1<sup>ST</sup> SEM - Logic Building and Problem Solving with Python Practical Examination**  
**Questions – Dt. 27.11.2024**

**Write the Problem Definition, Algorithm, Flowchart, Pseudo code, Python Programming Code & Output (2 Iterations) in Answer sheet.**

1. Write the Algorithm, Flowchart, Pseudocode and Program to accept two numbers from users, compute summation and print the Result.
2. Write the Algorithm, Flowchart, Pseudocode and Program to enter a number from a user and check the no. is greater than 10 or not.
3. Each day, the courier service delivers some letters. The number of letters is different each day. Regardless of the number of letters delivered by the courier service, they are paid a carrying charge of \$5. Write the Algorithm, Flowchart, Pseudocode and Program.
4. Write the Algorithm, Flowchart, Pseudocode and Program to accept item name, price, and quantity. You need to calculate value as the product of price and quantity, and display the calculated value and the item name using variables.
5. Write the Algorithm, Flowchart, Pseudocode and Program to Accept two numbers and print the larger of the two numbers.
6. Write the Algorithm, Flowchart, Pseudocode and Program to Print the value of  $nX$  only if the value of  $nX$  is greater than 10 and  $nX$  is an even number.
7. Write the Algorithm, Flowchart, Pseudocode and Program to decide about the discount percentage on a TV, the sales person needs to check the type of TV. If the TV is Black and White [B], the discount will be 5 percent of the selling price. If the type of TV is coloured [C], then

he has to verify the size of TV screen. For 14 inches screen, discount is 8 percent of the selling price and for 21 inches screen, the discount is 10 percent of the selling price. Write a pseudocode to show the discount percentage.

8. Amy is writing the algorithm for automated telephone call transfer to various departments of the company such as Marketing, Finance, Customer Care, Human Resource (HR), and Information. Write the Algorithm, Flowchart, Pseudocode and Program.
9. Write the Algorithm, Flowchart, Pseudocode and Program where interest is calculated and displayed for the given balance and rate.
10. Write the Algorithm, Flowchart, Pseudocode and Program where a number is incremented by 1.
11. Write the Algorithm, Flowchart, Pseudocode and Program to calculate the sum of 10 numbers entered by the user.
12. Write the Algorithm, Flowchart, Pseudocode and Program to calculate average marks of 10 students.
13. The total expenditure on salaries for the month needs to be calculated. As per company policy an employee receives a minimum of \$500. Depict the logic for automating the task by using Algorithm, Flowchart, Pseudocode and Program.
14. Write the Algorithm, Flowchart, Pseudocode and Program to display all the even numbers upto 100.