Cavalier Institute - https://cavalierinstitutions.com

Date	Oct-19-2024	Session No	Test

Topic : Programming / Problem solving

TEST - Programming / Problem solving

Max Marks - 25 5x1 = 5

Time 30 Mins

1. Write a Python program that generates a list of factorials for numbers in a given range [a, b], and returns the number with the maximum factorial value in that range.
2. Write a Python function **is_prime(n)** that returns True if n is a prime number. Use this function to print all prime numbers between 1 and 50
3. Create a function **find_max(numbers)** that takes a list of numbers as input and returns the largest number in the list.
4. Write a function **multiply_by(numbers, n)** that takes a list of numbers and a single number n, and returns a new list where each element of the original list is multiplied by n.
5. Write a function **product_list(numbers)** that takes a list of numbers as input and returns the product of all the elements in the list.

END