MPVM GANGA GURUKULAM COMPUTER SCIENCE CLASS XI

HOLIDAY HOMEWORK (2025-26)

Instructions:

Complete all questions in a notebook or type them in a document. Submit on the first day after the holidays.

Be creative and explore real-world applications.

Section A: Programming Practice

1. Python Basics:

Write a Python program to:

- A) Find the factorial of a number.
- B) Check if a number is prime.
- C) Print the Fibonacci series up to n terms.

2. Mini Project (Choose any one):

Create a simple calculator using Python.

Design a quiz app that asks 5 questions and shows the final score.

Build a program that takes a list of marks and gives the class average and topper.

Section B: Theory and Research

1. Research Topics

Artificial Intelligence: Uses and Future. Cyber security and Ethical Hacking.

Create a short PowerPoint on any one of the topics above, and submit PPT in a video form. Or create a video on Canva and send it in the computer science class group. Add 5–7 slides with bullet points, images, and your own explanation.

<u>Section C:</u> Tech Diary (1 entry per week):

Note one interesting tech news or invention.

Write 3–5 lines about why you found it interesting.