Assignment 1

Course Outcome (CO1): Understand basic approaches and strategies used in computational problem solving.

Part A: Short Answer Questions

| Q. No. | Question | Bloom's Level |
|-----------|--|--------------------------|
| 1 | Differentiate between hardware and software with suitable examples. | Understand |
| 2 | Distinguish between system software and application software. | Understand |
| 3 | Explain the working of a compiler and an interpreter with proper comparison. | Analyse |
| 4 | Define an algorithm. List two characteristics of a good algorithm. | Remember / Understand |

Part B: Long Answer Questions

| Q. No. | Question | Bloom's Level |
|-----------|---|------------------|
| 5 | Draw a neat block diagram of a computer system and explain the function of each component. | Understand |
| 6 | Explain the different types of software in detail with examples. | Understand |
| 7 | Compare and contrast machine-level, assembly-level, and high-level programming languages with examples. | Analyse |
| 8 | Why are high-level languages preferred for modern software development? Give reasons. | Evaluate |
| 9 | What is a flowchart? Draw a flowchart to find the largest of three numbers. | Apply |

Part C: Application / Case-based Questions

| Q. No. | (Ouestion | Bloom's Level |
|-----------|--|------------------|
| 10 | Write an algorithm to calculate the factorial of a given number. | Apply |

| Q. No. | Unjestion | Bloom's Level |
|-----------|--|--------------------|
| 11 | Case: Payroll management system – Identify required software + choose compiler/interpreter. | Apply / Analyse |
| 12 | A new student is learning programming. Which type of language should they start with? Explain. | Evaluate |

*** ALL THE BEST ***