GALKOT SECONDARY SCHOOL
Galkot Municipality-3, Hatiya, Baglung
Grade 11 Computer Science Internal Assignment

Full Marks: 36 **Time:** As per teacher's instruction

Subject: Computer Science (Grade XI)

Instructions
Please read the below instructions carefully before proceeding further:

- Learners are instructed to download the IA Question Paper, prepare the answers (Soft Copy), and submit them before the deadline.

- **Assignment submissions are accepted only in .pdf format.**

- Assignments must be **typed** and **formatted** as per the following specifications:

    - Page Margin – 1 inch on all sides

    - Page Orientation – Portrait

    - Page Size – A4

    - Font Family - Times New Roman

    - Font size - 12

    - Alignment - Justified.

- The total page limit shall not exceed 8 pages.

- **Answers for 6 marks questions should be approximately 300-400 words and not more than 150-200 words for 3 marks questions.**

- Only ONE submission is allowed per assignment.

- Please restrict the assignment document size to <2 MB. Avoid inserting images of very high resolution into the document to remain within the size limit. The assignment response document should NOT contain colour images or highlighting of text content.

- If the learner resubmits the assignment, it is permissible only on or before the cut-off date, and the last submission will be considered for evaluation purposes.

- **Content that has been directly copied from the Internet and Assignments that have been copied and shared among students will be automatically rejected and disqualified.**

Q.1. [6 Marks]

Define computer system. Explain the major components of a computer system with a neat and labeled block diagram.
(Hint: Include Input Unit, Output Unit, CPU, Memory Unit, etc.)

Q.2. [6 Marks]

Convert the following numbers as directed:
a) $(11001101)_2 \rightarrow (?)_{10}$
b) $(458)_{10} \rightarrow (?)_{16}$
c) $(3AF)_{16} \rightarrow (?)_2$
d) $(11011101011)_2 \rightarrow (?)_8$
Also, explain **one real-life application of number systems** in computer science.

Q.3. [6 Marks]

What are logic gates? Explain **AND, OR, and NOT** gates with their **symbol, truth table, and Boolean expression**.
Also, write the Boolean expression and draw a logic diagram for the following circuit:
$$Y = A \cdot (B + C)$$

Q.4. [6 Marks]

Explain the concept of **flowchart** and its importance in program development.
Draw a flowchart to calculate the **sum of the first 10 natural numbers**.

Q.5. [6 Marks]

Write a short program in **QBASIC or C language** to input three numbers and display the **largest among them**.
Also, explain the **algorithm** used in your program.

Q.6. [6 Marks]

a) Define computer network. Write any **four advantages** of networking.
b) Differentiate between **LAN, MAN, and WAN** with suitable examples.
c) Write the full forms of:
i) IP   ii) URL   iii) HTTP   iv) FTP

THE END