KIGALI INDEPENDENT UNIVERSITY ULK
SCHOOL OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF COMPUTER SCIENCE

YEAR 1/CS/EVENING   **ACADEMIC YEAR 2022-2023**

DATE: 12/05/2023   **MAXIMUM MARKS: 10**

INDIVIDUAL ASSIGNMENT OF ANALOG AND DIGITAL ELECTRONICS

INSTRUCTIONS:

1. **This paper contains FOUR (4) Questions**
2. **Attempt ALL Questions**

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1. Distinguish between analog and digital signals and give at least one example for each. **/3 Marks**
2. Describe the advantages of digital technology. **/3 Marks**
3. Compute the 2's complement of the following binary number: 1100101   **/2 Marks**
4. Do the following operation in binary number systems: **/2 Marks**

      100110111101

      ×   101
      _____

Good Luck!!!