Graphic Era
HILL UNIVERSITY
Established by an Act of the State Legislature of Uttarakhand (Adhiniyam Sankhya 12 of 2011)
University under section 2(f) of UGC Act, 1956

Term Evaluation (Odd) Semester Examination September 2025

Roll no.............................

Name of the Course and semester: Diploma CSE , I SEMESTER
Name of the Paper: Fundamental of IT
Paper Code: DTIT 104

Time: 1.5 hour   Maximum Marks: 50

Note:
   (i)   Answer all the questions by choosing any one of the sub questions
   (ii) Each question carries 10 marks.
   (iii) Please specify COs against each question.

Q1.   (10 Marks)

a. List and explain the five generations of computers with their key features. (CO1)
                                    OR
b. Describe the essential characteristics of a computer that distinguish it from calculators and other devices. (CO1)

Q2.   (10 Marks)

a. Apply your knowledge of computer organization to explain how input, processing, and output would occur when booking a train ticket online. (CO1)
                                    OR
b. Demonstrate how excessive dependence on computers can create challenges in professional and social contexts. (CO1)

Q3.   (10 Marks)

a. Analyze the differences between Microcomputers, Minicomputers, and Supercomputers in terms of performance, applications, and cost. (CO1)
                                    OR
b. Compare and contrast Compiler, Interpreter, and Assembler with respect to their roles in program execution. (CO2)

Q4.   (10 Marks)

a. Evaluate the effectiveness of Output devices (Printer, Plotter, Monitor) for use in a publishing company. Provide reasons for your choice. (CO2)
                                    OR
b. Judge the importance of secondary storage devices in ensuring reliability and long-term use of data. Support your answer with examples. (CO2)

Q5.   (10 Marks)

a. Design a simple block diagram of CPU operations showing ALU, CU, and Registers. Explain how they coordinate during program execution. (CO2)
                                    OR
b. Explain the concept of memory hierarchy in computer systems. Discuss its levels, characteristics, and the significance of each level in terms of performance and cost. (CO2)