AJAY KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD
DEPARTMENT OF IT
Sessional Test-1

Program: B. Tech.
Session: 2024-25
Subject: Programming for Problem Solving
Max. Marks: 25

Semester: 2nd
Section: S-11 to S-20
Subject Code: BCS-201
Time: 1 Hour

OBE Remarks: All questions are related to CO1.

Q.No	1	2	3	4	5	6	7
CO No.	CO1	CO1	CO1	CO1	CO1	CO1	CO1
Bloom's Level* (L1 to L6)	L1	L2	L1	L2	L1	L6	L2

Bloom's Level: L1: Remember, L2: Understand, L3: Apply, L4: Analyze, L5: Evaluate, L6: Create

Note: Answer **all** the sections.

Section-A

A. Attempt **all** the parts.   (3x2 = 6)
1. What is memory hierarchy? Draw its pyramid structure.
2. Differentiate between Compiler and Interpreter.
3. Why is C called structured programming? Explain.

Section-B

B. Attempt **all** the parts.   (3x4 = 12)
4. Describe the Algorithm, pseudocode, and flowchart with a proper example.
5. What is a digital computer? Draw the block diagram of a digital computer and explain each component of it.
6. Write an Algorithm and draw a flow chart to find the sum of n natural numbers.

Section-C

C. Attempt **all** the parts.   (1x7 = 7)

7. What are data types? Describe its types and discuss primary data types with a table containing details like name, required memory size, format specifier, and range.

Faculty Sign

HoD Sign