

**AJAY KUMAR GARG ENGINEERING COLLEGE, GHAZIABAD**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Sessional Test

**Program: B.Tech**

**Session: 2025-26**

**Subject: Python Programming**

**Max. Marks: 50**

**Semester: III**

**Section: IT, CSIT, ECE, CE, ME, EN**

**Subject Code: BCC 302**

**Time: 2 Hours**

**OBE Remarks:**

Q.No	1	2	3	4	5	6	7	8	9	10	11	12
CO No.	CO1	CO2	CO3	CO1	CO1	CO1	CO3	CO2	CO2	CO1	CO2	CO1
Bloom's Level*	L2	L2	L4	L6	L2	L2	L2	L6	L6	L2	L3	L2

**Weightage CO1: 21.5**

**Weightage CO2: 21.5**

**Weightage CO3: 7**

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

**Note:** Answer all the sections with all the questions

**Section-A**

**(2\*5=10)**

1. Explain the membership operator with example.
2. Compare islower() and isupper() string methods with an example.
3. for i in range(10):
 

```
        if i==5:
            continue
        print(i)
```
4. Write a python program to check the number is even or odd.
5. Explain Python's indentation rule with an example. Why is indentation important in Python?

**Section-B**

**(5\*5=25)**

6. Write the data type classification in detail with example.
7. Write the String data structure of python. Also discuss the 5 inbuilt methods of string with suitable example.
8. Create a python program to check if a given number is Palindrome or not.
9. Write a Python program to create a simple calculator, enter numbers from the user and display output
10. Explain type conversion in python with examples.

**Section-C**

**(7.5\*2=15)**

11. Explain range function with example. Also write a Python program to construct the following pattern:

A

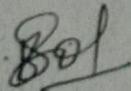
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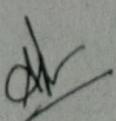
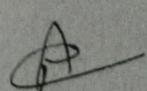
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KLMNO

12. Explain operator and all its types with examples. Also explain the role of precedence and associativity in an expression.



Faculty Sign

HOD Sign