

এই মর্মে প্রমিস করছি যে,

- 1) আমি নিম্নোক্ত সকল প্রশ্নের উত্তর হাতে লিখে জমা দিবো ।
- 2) কোনো ধরনের নকল করবো না । ফ্রেন্ড বা ইন্টারনেটের হেল্প নেয়া নিষেধ ।
- 3) সকল প্রশ্নের উত্তর ইংরেজিতে দিতে হবে। কোনো প্রকার বাংলা লিখা নিষিদ্ধ।

তবে, pycharm এবং আমার নোটের হেল্প নেয়া যাবে ।

Your Full Name:
Your address:

1. What is Python? Mention one of its key features. (03 Marks)

2. What is the difference between a list and a tuple in Python? (02 Marks)

3. Write a Python program to check if a number is even or odd. (03 Marks)

4. What is the purpose of the `len()` function in Python? (03 Marks)

5. Explain the use of the `range()` function with an example. (03 Marks)

6. What is a Python dictionary? How is it different from a list? (03 Marks)

7. Write a Python program to reverse a string. (03 Marks)

8. What is the difference between a **for** loop and a **while** loop in Python? (03 Marks)

9. Explain the concept of function arguments with an example. (03 Marks)

10. What is a module in Python? How do you import one? (02 Marks)

11. What does the `try-except` block do in Python? (03 Marks)

12. Explain the purpose of the `break` and `continue` statements in loops. (04 Marks)

13. What is the purpose of the `def` keyword in Python? (03 Marks)

14. Create a simple list, tuple, set, and dictionary, each containing 7 values. Provide the definitions for each of these data structures and explain their characteristics. (04 Marks)

15. Write two separate Python programs. The first program should demonstrate how to write content to a file. The second program should read the content from the file and display it. (04 Marks)

16. Write a Python class called Car that has attributes like make, model, and year, and a method that prints a description of the car. hints, use constructor (04 Marks)