PYTHON EXAMINATION PAPER

📝 **Maximum Marks: 40**

Instructions:

All questions are **compulsory**.
Read each question carefully before answering.
Marks are assigned to each question. Answer accordingly.
Write **neat and structured answers** for theoretical questions.
In practical questions, provide **correct logic and explanations**.
Attempt all parts in **sequence** as given.

Section A – Theoretical Questions (10 Marks)

📌 *(Each question carries 1 mark)*

Q1 Answer the following questions in brief.

1. What is the purpose of the print() function in Python?
2. Explain the difference between **single-line** and **multi-line comments** in Python.
3. List any **two basic data types** in Python with examples.
4. What will be the output of bool(None) in Python?
5. What is **type casting**? Provide an example.
6. Differentiate between **List** and **Tuple** in Python.
7. Explain the role of the if-else statement in Python.
8. How does a for loop differ from a while loop?

9️⃣ What is the significance of the match-case statement in Python?

🔟 What is the purpose of the finally block in exception handling?

Section B – Application-Based Questions (30 Marks)

📌 *(Each question carries 7.5 marks)*

Q11: Counting Vowels and Consonants (7.5 Marks)

- Take a **sentence** as input from the user.
- Count and display the number of **vowels** and **consonants** separately.

📝 **Example:**

Input: "Python is amazing"

Output: Vowels: 5, Consonants: 10

Q12: Billing System with Discounts (7.5 Marks)

A store offers discounts based on the **purchase amount**:

- **Above ₹5000** → 20% Discount
- **Between ₹2000 and ₹5000** → 10% Discount
- **Below ₹2000** → No Discount

💡 **Task:**

- Take the purchase amount as input.
- Calculate the final bill after applying the discount.
- Display the total bill amount.

📝 **Example:**

Input: ₹4500

Output: Discount Applied: 10%, Final Bill: ₹4050

Q13: Finding the Second-Highest Salary (7.5 Marks)

- Given a list of employee salaries, find the **second-highest salary**.
- If all salaries are the same, display **"No second-highest salary available."**

📝 **Example:**

Input: [40000, 25000, 50000, 35000, 50000]

Output: Second-Highest Salary: ₹40000

Q14: Student Marks Lookup (7.5 Marks)

- A dictionary stores student names as **keys** and their **marks** as values.
- The user inputs a student's name, and the program should **display their marks**.
- If the name is **not found**, print **"Student not found in records."**

📝 **Example:**

Input: "John"

Output: John scored 85 marks.

MARKING SCHEME

✅ **Section A (Theoretical) → 10 Marks (1 mark per question)**
✅ **Section B (Application-Based) → 30 Marks (7.5 marks per question)**
✅ **Total Marks → 40**

📌 **Note:**
✓ Partial marking may be given for **correct logic** in application-based questions.
✓ Use **proper variable names, indentation, and comments** in coding solutions.
✓ Attempt all questions with **clear explanations**.

📝 Best of Luck! 🚀