

**ALL SAINTS' CHURCH SR. SEC. SCHOOL**  
**HALF YEARLY PRACTICAL EXAMINATION**  
**SUBJECT: IP**  
**CLASS: XI (ALL)**

**MM: 30 MARKS**

**20 MARKS- CODING**

**5- COPY**

**5-VIVA**

**Lists:**

1. Write a Python program to create an empty list, then append 5 integers to the list. Finally, print the list.
2. Initialize a list with the elements `[3, 5, 7, 9, 11]`. Insert the number 6 at the second position in the list and print the updated list. Then Use the `pop()` method to remove the last element from the list, and print the updated list
3. Write a Python function to traverse a list and print all elements that are greater than 10.
4. Given a list of numbers `[8, 2, 3, 9, 5, 6, 1, 9, 8, 9]`, use Python list methods to:
  - Remove the number 3 from the list.
  - Add the number 12 to the end of the list.
  - Count how many times the number 9 appears in the list.
  - Find the index of the number 5.
  - Print the updated list.
5. Create a Python function that takes a list of numbers as input and returns the minimum, maximum, and sum of the list.
6. Write a Python program to reverse a list of strings using the `reverse()` method, and then sort the reversed list in ascending order using the `sort()` method.

**Dictionaries: (DO ANY 4)**

1. Write a Python program to create a dictionary of 3 students and their scores (key: student name, value: score). Then, update the score of one student and print the updated dictionary in form of key-value pair.
2. Write a Python program to create a dictionary with keys as product names and values as their prices. Then, add a new product to the dictionary and print the updated dictionary where the value is greater than 500.
3. Create a dictionary with 5 key-value pairs where the keys are country names and the values are their populations. Write a Python program to:
  - a. Delete one key-value pair using the `del` keyword.
  - b. Check if a specific item is present in the dictionary.
  - c. If present, update its quantity using the `update()` method.
  - d. If not, add it to the dictionary

- e. Print the updated dictionary.
- 4. Write a Python program to initialize a dictionary with student names and their grades. Then, use the `clear()` method to remove all entries from the dictionary and verify that it is empty.
- 5. Write a Python program that takes a dictionary of employee names (keys) and their salaries (values). The function should return the name of the employee with the highest salary.
- 6. Write a Python function that takes a dictionary as input and prints all the values in the dictionary without using the `values()` method (use a loop instead).