

Quiz 2 Questions [20 marks, 1 hr.]

Please write a python program along with brief explanation of the variables used and the correctness of the program. You may not use a computer, calculator etc. for this test.

Q1. [5 marks] Create a class named **Vehicle** for maintaining vehicle records. We need to have the following attributes for the objects: Model Number, Registration Number, Manufacture Date, Owner Name, City (where it was sold), Price.

- Write the constructor with default values of attributes.
- Implement the special function to print all attributes of the object.
- There must be a count of the number of objects created.
- Write a method to update the Owner Name, City and Price; whenever it is resold.
- Given a list of objects, **IIT_Vehicles**, print all the objects whose price is more than 5 lakhs.

Q2. [5 marks] Create two dictionaries – one containing grocery items and their prices and another containing grocery items and quantity purchased. By using the values from these two dictionaries write a code to compute the total bill.

Use data from the tables below:

Milk	50
Sugar	45
Toor Dal	150
Rice	60
Coriander	200

Milk	1
Sugar	2
Rice	5
Coriander	1
Toor Dal	2

Q3. [1 mark] each. What will be the output of the following code snippet?

- msg = 'IIT Bhilai'
s = list(msg[-5:-2])
print(s)
- num=[10,20,30,40,50]
num[2:4] = []
print(num)
- num1=num2=(10,20,30,40,50)
print(30 not in num2)
- t={1,4,5,2,3}
print(type(t))

Q4. [4 marks] Given the dictionary below,

marks = {

'Subu': {'Maths': 88, 'Eng': 60, 'SSt': 95};

'Naman': {'Maths': 85, 'Eng': 56, 'SSt': 89};

'Ankit': {'Maths': 82, 'Eng': 76, 'SSt': 99};

}

- a. Print the marks obtained by Ankit in English.
- b. Set the marks obtained by Naman in Maths to 98.
- c. Print the values in dictionary in sorted order by name.

Q5. [2 marks] Given the following tuple,

tpl = ('F', 'I', 'a', 'b', 'b', 'e', 'r', 'g', 'a', 's', 't', 'e', 'd')

- a. Add an ! at the end of the tuple
- b. Extract ('b', 'b') from the tuple.
- c. Check whether 'r' exists in the tuple
- d. Convert tuple to a list.