

Question Paper Code: 92825

B.E./B.Tech. DEGREE EXAMINATION, AUGUST 2021

Second Semester

Information Technology

19UIT205 - Programming Fundamentals Using Python

(Regulation 2019)

Part A – Answer any 10 Questions
(10*2 =10 Marks)

	Marks	CO	PO/PSO	BLOOM'S LEVEL
1 Let's take a simple problem of counting the number of flights in the airport. At the start of the day there were 100 flights in the airport. Based on the number of takeoffs and number of landings in a day, how would you figure out the current number of flights in the airport? What can be the process for the above problem?	2	CO2	PO1	[APPLY]
2 Contrast Algorithm and Pseudo code	2	CO3	PO2	[Analyze]
3 Assume that the input value provided to variable, Counter is 1 What is the outcome of the following pseudo-code? input Counter while(Counter<5) do Counter=Counter+1 display Counter end-while	2	CO3	PO2	[Analyze]
4 List out the built-in functions that are used in Tuple?	2	CO3	PO2	[Analyze]
5 List out some of the math module functions in Python. Once you have imported the math module, you can use some of the below functions.	2	CO3	PO2	[Analyze]
6 List the String data type in Python that has many inbuilt functions which make it easier to work with strings. Consider the string, name="Raghav".	2	CO3	PO2	[Analyze]
7 What Is The Return Value Of The Trunc() Function?	2	CO1	PSO1	[Understand]
8 Is It Mandatory For A Python Function To Return A Value?	2	CO1	PSO1	[Remember]
9 What Is The Return Keyword Used For In Python?	2	CO1	PSO1	[Understand]
10 Describe how we can use a module in an another program with an example	2	CO1	PSO1	[Understand]
11 Explain how we can create module	2	CO1	PSO1	[Understand]
12 What is Time Tuple?	2	CO1	PSO1	[Understand]
13 How do you handle the exception inside a program when you try to open a non-existent file?	2	CO1	PSO1	[Understand]
14 Define file object	2	CO1	PSO1	[Remember]

15 How do you delete a file in Python? 2 CO1 PSO1 [Understand]

**PART-B Answer any 3 Questions
(3*10=30 Marks)**

16 A retail store management wants to automate the process of generating the bill amount for its customers. As on initial step, they want to initialize the bill details of a customer as given below: Bill id should be 1001, Customer id should be 101 and bill amount should be 199.99. After initializing, all the values must be displayed in the format given below: 10 CO2 PO1 [APPLY]

- a. Bill_id:1001
- b. Customer_id: 101
- c. Bill_amount:Rs.199.99

Suppose the retail store management wants to provide 5% discount for the bill amount above 1000, 2% discount for all bill amounts above Rs.500 and less than 1000 and all other bill amount, a discount of 1%

Objective : given a dictionary customer_details is representing a computational problem be able to perform different operations using an object oriented language (python) on eclipse ide 10 CO2 PO1 [APPLY]

Problem description :

Given below is a dictionary customer_details representing customer details from retail application – customer id is a key and customer name is value .

Customer

```
_details={1001:"john",1004:"jill",1005:"joe",1003:"jack"}
```

Write a python code to perform below mentioned operations:

- 17 a. Print details of customers
- b. Print numbers of customers
- c. Print customers name in ascending order
- d. Delete the details of customer with customer id=1005 and print updated dictionary
- e. Update the name of customer with customer id=1003 to "marry" and print updated dictionary
- f. Check whether details of customer id 1002 exists in the dictionary

The road transport corporation (RTC) of a city wants to know whether a particular bus-route is running on profit or loss. Assume that the following information are given:
Price per litre of fuel = 70
Mileage of the bus in km/litre of fuel = 10
Price(Rs) per ticket = 80
The bus runs on multiple routes having different distance in kms and number of passengers.
Write a function to calculate and return the profit earned (Rs) in each route. Return -1 in case of loss

10 CO2 PO1 [APPLY]

Construct an appropriately general set of functions that can draw shapes as in Figure 4.2.

10 CO2 PO1 [APPLY]

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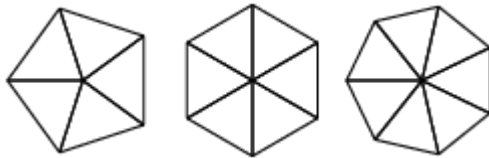


Figure 4.2

The final listing for remember_me.py assumes either that the user has already entered their username or that the program is running for the first time. We should modify it in case the current user is not the person who last used the program.

10 CO2 PO1 [APPLY]

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Before printing a welcome back message in great_user(), ask the user if this is the correct username. If it's not, call get_new_username() to get the correct username.

