



Continuous Assessment Test(CAT)-II October 2023

Programme	: MCA	Semester	: Fall 2023-24
Course	: Python Programming	Code	: PMCA602L
Faculty	: Dr.B.Saleena	Class Nbr	: CH2023240101727
Time	: 1 ½ Hours	Slot	: G1
		Max. Marks	: 50

Answer ALL Questions

1. Write a Python Program **using regular expression methods only.**
- (i) To remove leading zeros from an IP address. **(2 Marks)**
Example IP address= 116.08.094.096 Output = 116.8.94.96
 - (ii) To find all three, four, and five character words in a string. **(2 Marks)**
 - (iii) To convert a date of yyyy-mm-dd format to dd-mm-yyyy format. **(2 Marks)**
 - (iv) To search for a word in a sentence and also find the location within the original sentence where the pattern occurs. If the word is not present in the sentence then it should prompt "Not Found" **(4 marks)**
Example Sentence : There is no success without hardship
Search String/word: success **Output:** Found in the location 12 to 19
Search String/word: Workshop **Output:** Not Found
2. Write a generalized Python Code to read a phone number in the pattern 415-555-4242 as input from the user and pass it as a parameter through the functions. Write a function called **isphonenumber ()** to recognize the above pattern without using regular expression and another function **chkphonenumber()** to recognize the same pattern using regular expression. **10**
3. A list contains name of cricketer, his age, number of test matches that he has played and the average runs that he has scored in each test match. Create an array of lists to hold records of 5 such cricketers and then write a python program using functions to **(2 Marks)**
- (i) Read the list and arrange them in ascending order based on average runs. **(2 marks)**
 - (ii) List the cricketer's name who have scored more than 100 runs. **(2 Marks)**
 - (iii) Use variable keyword arguments to pass the parameters name and age and calculate the average age of the players. **(4 marks)**
4. Write a Python Program that creates an array of elements and handles various exceptions, including ZeroDivisionError, IndexError, ValueError, TypeError, and AttributeError. The program demonstrates how to handle these exceptions. **(2 Marks Each)** **10**
5. Write a Python Program to create a text file "Myhobby.txt" which contains a few sentences of your favourite hobby. The file should always have the option of adding new lines to it. Perform the following operations with the file **(3 marks)**
- (i) Read a word from the user as input and count the number of occurrences of that particular word in the text file "Myhobby.txt" **(5 Marks)**
 - (ii) Handle the exceptions when you attempt to read or write a file that doesn't exist in the specified location. **(2 Marks)**