Python Question Paper Aarthi P

Subject: Python Programming

Topic: File Handling

Total Questions: 10

Instructions:  
- Write Python programs to solve the following problems.  
- Use appropriate file handling modes and exception handling where necessary.

# Section A: Basic File Operations (Q1 - Q3)

Q1. Write a Python program to create a text file named `sample.txt`, write your name and a message into it, and then close the file.

with open("sample.txt", "w") as f:

f.write("Aarthi \nHi all!! this is Aarthi here...")

Q2. Write a program to read and display the contents of `sample.txt`.

with open("sample.txt", "r") as f:

print(f.read())

Q3. Write a Python script to append a new line `"This is an appended line"` to `sample.txt` and display the updated content.

with open("sample.txt", "a") as f:

f.write("This is an appended line")

with open("sample.txt", "r") as f:

print(f.read())

# Section B: File Processing and Analysis (Q4 - Q7)

Q4. Write a Python program to count the total number of lines in a given file `sample.txt`.

with open("sample.txt","r") as f:

l=f.readlines()

print(len(l))

Q5. Write a Python program that reads a file and prints only those lines that contain the word “Python” (case-sensitive).

with open("sample.txt","r") as f:

l=f.readlines()

for i in l:

if "Python" in i:

print(i)

Q6. Write a Python program to count the number of words and characters in the file `sample.txt`.

with open("sample.txt","r") as f:

l=f.read()

ccnt=len(l)

wcnt=len(l.split())

print(ccnt, wcnt)

Q7. Write a program to copy the contents of `sample.txt` to another file `copy\_sample.txt`.

with open("sample.txt","r") as f:

l=f.read()

with open("copy\_sample.txt", "w") as f:

f.write(l)

# Section C: Advanced File Handling (Q8 - Q10)

Q8. Write a Python program to display the last 3 lines of a text file.

with open("sample.txt", "r") as f:

l=f.readlines()

print(l[-3:])

Q9. Write a Python program that reads numbers from a file `numbers.txt`, one per line, and writes only the even numbers to a new file `even\_numbers.txt`.

with open("numbers.txt","r") as f1, open("even\_numbers.txt","w") as f2:

l=f1.readlines()

for i in l:

if int(i)%2==0:

f2.write(i+"\n")

Q10. Create a program that accepts user input (name, age, city) and stores it in a CSV file `users.csv`. Ensure that every new entry is stored on a new line.

import csv

name = input("Enter your name:")

age = input("Enter your age:")

city = input("Enter your city:")

with open("users.csv", "a", newline="") as csvf:

writer = csv.writer(csvf)

writer.writerow([name, age, city])