Python Question Paper

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.

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

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

# 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`.

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

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

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

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

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

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`.

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.

1. f = open("sample.txt", "w")

f.write("Rathi\n")

f.write("Hello, this is a file handling demo.\n")

f.close()

2. f = open("sample.txt", "r")

content = f.read()

print(content)

f.close()

3. f = open("sample.txt", "a")

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

f.close()

f = open("sample.txt", "r")

content = f.read()

print(content)

f.close()

4. f = open("sample.txt", "r")

lines = f.readlines()

print("Total lines:", len(lines))

f.close()

5. f = open("sample.txt", "r")

for line in f:

if "Python" in line:

print(line.strip())

f.close()

6. f = open("sample.txt", "r")

content = f.read()

words = content.split()

print("Words:", len(words))

print("Characters:", len(content))

f.close()

7. source = open("sample.txt", "r")

destination = open("copy\_sample.txt", "w")

for line in source:

destination.write(line)

source.close()

destination.close()

8. f = open("sample.txt", "r")

lines = f.readlines()

f.close()

last\_three = lines[-3:]

print("Last 3 lines:")

for line in last\_three:

print(line.strip())

9. infile = open("numbers.txt", "r")

outfile = open("even\_numbers.txt", "w")

for line in infile:

number = int(line.strip())

if number % 2 == 0:

outfile.write(f"{number}\n")

infile.close()

outfile.close()

10. import csv

name = input("Enter your name: ")

age = input("Enter your age: ")

city = input("Enter your city: ")

f = open("users.csv", "a", newline='')

writer = csv.writer(f)

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

f.close()