

General Instruction:

- (a) Make sure to follow a sequence while writing.
- (b) Paper is divided into 2 sections i.e., Section A & B
- (c) Section A Contains Conceptual Type Questions of 5 marks
- (d) Section B contains Competency Type Questions of 20 marks

SECTION A (OBJECTIVE TYPE QUESTIONS)-5 MARKS

- Q1.** What will be the data type of the expression `12/5==0`? 1
- a) True b) False c) bool d) float
- Q2.** What will be output of the following code: 1
- ```
d1={1:2,3:4,5:6}
d2=d1.get(3,5) print(d2)
```
- a) 3                      b) 4                      c) 5                      d) Error
- Q3.** Consider the given expression: 1
- 8 and 13 > 10**
- Which of the following is the correct value of the expression?
- a) True      b) False                      c) None                      d) NULL

Questions 4 and 5 are ASSERTION AND REASONING based questions. Mark the correct choice as

- a. Both A and R are true and R is the correct explanation for A
- b. Both A and R are true and R is not the correct explanation for A
- c. A is True but R is False
- d. A is false but R is True

- Q4.** **Assertion (A):-** In the following code, statement3 is not required to close the file 'somefile.txt'. 1

```
with open('somefile.txt', "w") as outfile: #statement 1
 outfile.write("Some text\n") #statement2
 outfile.close() #statement3
```

**Reasoning (R):-** When you use 'with' statement in open function, you do not need to close the file at the end, because 'with' would automatically close it for you.

- Q5.** **Assertion (A):** If L is a list, then `L+=range(5)` is an invalid statement. 1

**Reason (R):** Only a list can be concatenated to a list.

**SECTION B (SHORT ANSWER TYPE QUESTIONS)- 20 MARKS**

Q6. (a) Given is a Python string declaration: 2

```
mySubject = "Computer Science with Python"
```

(i) Write the output of: `print(mySubject[-27:-10:2])`

(b) Write the output of the code given below:

```
>>>a=[10,20,30,40,50,60,70]
```

```
>>> a[3:5]=[100,1000]
```

```
>>> a[3:5]=[10000]
```

```
>>> print(a)
```

Q7. `t1=(10,20,"book",30,9.5,"item",[12,13],(3,4),30,5,30)` 2

```
print(t1.index(20))
```

```
print(t1.index(30))
```

```
print(t1.count(30))
```

```
print(t1[-8:-4])
```

Q8. Write a user-defined function **Count\_H\_T()** in Python that displays the number of lines starting with 'H' and 'T' in the file "Poem.txt". 2

Example, if the file contains:

Here we go round the mulberry bush,

The mulberry bush,

The mulberry bush.

Here we go round the mulberry bush

On a cold and frosty morning.

**The line count should be 4.**

Q9. Write a function **Replace\_Space()** in Python which should read each character of a text file "MYFILE.TXT" and then replace all spaces from text with dash (-). 2

Example:

If the file content is as follows:

*"The relative paths are relative to current working directory."*

The **Replace\_Space()** function should display the output as:

**“The relative paths are relative to current working directory.”**

**Q10. Find output of the above code:**

**2**

```
def convert(s):

 n = len(s)
 m = ''
 for i in range(0, n):

 if(s[i]>='a' and s[i]<='m'):
 m = m + s[i].upper()
 elif(s[i]>='n' and s[i]<='z'):

 m= m + s[i-1]
 elif (s[i].isupper()):

 m = m + s[i].lower()
 else:
 m = m + '#'

 print(m)

convert('Hello@Python')
```

**Q11. Write a function AMCount() in Python, which should read each character of a text file STORY.TXT, should count and display the occurrence of alphabets A and M (including small cases a and m too).**

**2**

For Example:

If the file content is as follows:

Updated information

As simplified by official websites.

The EUCount() function should display the output as:

A or a:4

M or m :2

**Q12.** Write a function reverseFile() in Python, which should read the content of a text file "TESTFILE.TXT" and display all its line in the reverse order. 2

Example: If the file content is as follows:

It rained yesterday.

It might rain today.

I wish it rains tomorrow too.

I love Rain.

The RainCount() function should display the output as:

.yadretsey deniar tl

.yadot niar thgim tl

.oot worromot sniar ti hsiw l

.niaR evol l

**Q13.** What is the difference between readline() and readlines() functions of text files? 2

**Q14.** Write a single loop to display all the contents of a text file poem.txt after removing leading and trailing whitespaces. 2

**Q15.** Write the code to print just the last line of text file 'data.txt' 2