

Sample Question Paper
Class: XII Session: 2021-22
Computer Science (Code 083)
(Theory: Term-1)

Maximum Marks: 35

Time Allowed: 90 Minutes

General Instructions:

- The question paper is divided into 3 Sections - A, B, and C.
- Section A consists of 25 Questions (1-25). Attempt any 20 questions.
- Section B consists of 24 Questions (26-49). Attempt any 20 questions.
- Section C consists of 6 case study based Questions (50-55). Attempt any 5 questions.
- All questions carry equal marks.

Q.N.	Section-A
	This section consists of 25 Questions (1 to 25). Attempt any 20 questions from this section. Choose the best possible option.
1	Find the invalid identifier from the following a. none b. address c. Name d. pass
2	Consider the declaration L = 1, 'Python', '3.14'. What will be the data type of L? a. list b. tuple c. dictionary d. string
3	Given an object obj1= (10, 20, 30, 40, 50, 60, 70, 80, 90). What will be the output of print(obj1[3:7:2])? a. (40,50,60,70,80) b. (40,50,60,70) c. (40,50,60) d. (40,60)
4	Which of the following statements is not correct? a. If we try to read a text file that does not exist, an error occurs. b. If we try to read a text file that does not exist, the file gets created. c. If we try to write on a text file that does not exist, no error occurs. d. If we try to write on a text file that does not exist, the file gets created.
5	Which of the following options can be used to read the first line of a text file "Myfile.txt"? a. myfile = open('Myfile.txt'); print(myfile.read(line)) b. myfile = open('Myfile.txt','r'); print(myfile.read(1)) c. myfile = open('Myfile.txt'); print(myfile.readline()) d. myfile = open('Myfile.txt'); print(myfile.readlines())

6	<p>Assume that the position of the file pointer is at the beginning of 3rd line in a text file. Which of the following options can be used to read all the remaining lines?</p> <ul style="list-style-type: none"> a. <code>myfile.read(n-3)</code> b. <code>myfile.read(n)</code> c. <code>myfile.readline()</code> d. <code>myfile.readlines()</code>
7	<p>A text file "<code>student.txt</code>" is stored in the storage device. Identify the correct option out of the following options to open the file in read mode.</p> <ul style="list-style-type: none"> i. <code>myfile = open('student.txt','a')</code> ii. <code>myfile = open('student.txt','w')</code> iii. <code>myfile = open('student.txt','r')</code> iv. <code>myfile = open('student.txt')</code> <ul style="list-style-type: none"> a. only i b. both i and iv c. both iii and iv d. both i and iii
8	<p>The return type of the <code>input()</code> function is</p> <ul style="list-style-type: none"> a. string b. integer c. list d. tuple
9	<p>Which of the following operator cannot be used with string data type?</p> <ul style="list-style-type: none"> a. + b. in c. * d. /
10	<p>Given an object <code>obj1 = (10, 15, 25, 30)</code>. Identify the statement that will result in an error.</p> <ul style="list-style-type: none"> a. <code>print(obj1[2])</code> b. <code>obj1[2] = 20</code> c. <code>print(min(obj1))</code> d. <code>print(len(obj1))</code>
11	<p>Which of the following statements is incorrect in the context of binary files?</p> <ul style="list-style-type: none"> a. Information is stored in the same format in which the information is held in memory. b. No end of line (EOL) character translation takes place. c. Every line ends with a new line character. d. pickle module is used for reading and writing.
12	<p>What is the significance of the <code>tell()</code> method?</p> <ul style="list-style-type: none"> a. tells the path of the file. b. tells the current position of the file pointer within the file. c. tells the end position within the file. d. checks the existence of a file at the desired location.

13	<p>Which of the following statements is true?</p> <ul style="list-style-type: none"> a. pickling creates an object from a sequence of bytes. b. pickling is used for object serialization. c. pickling is used for object deserialization. d. pickling is used to manage all types of files in Python.
14	<p>Syntax of seek function in Python is <code>myfile.seek(offset, reference_point)</code> where <code>myfile</code> is the file object. What is the default value of <code>reference_point</code>?</p> <ul style="list-style-type: none"> a. 0 b. 1 c. 2 d. 3
15	<p>Which of the following components are part of a function header in Python?</p> <ul style="list-style-type: none"> i. function name ii. return statement iii. parameter list iv. def keyword <ul style="list-style-type: none"> a. only i b. i and iii c. iii and iv d. i,iii and iv
16	<p>Which of the following function headers is correct?</p> <ul style="list-style-type: none"> a. <code>def cal_si(p=100, r, t=2):</code> b. <code>def cal_si(p=100, r=8, t):</code> c. <code>def cal_si(p, r=8, t):</code> d. <code>def cal_si(p, r=8, t=2):</code>
17	<p>Which of the following is the correct way to call a function?</p> <ul style="list-style-type: none"> a. <code>my_func()</code> b. <code>def my_func()</code> c. <code>return my_func</code> d. <code>call my_func()</code>
18	<p>Which of the following characters act as default delimiter in a CSV file?</p> <ul style="list-style-type: none"> a. (colon) : b. (hyphen) - c. (comma) , d. (vertical line)
19	<p>Given below is one way of opening a file <code>Student.csv</code> file in write mode.</p> <pre>myfile = open("Student.csv", "w", newline='')</pre> <p>What is the importance of <code>newline=''</code>?</p> <ul style="list-style-type: none"> a. A new line gets added to the file. b. Empty string gets appended to the first line. c. Empty string gets appended to all lines. d. EOL character translation is suppressed.

20	<p>Consider the following python program.</p> <pre>import csv fh = open("Student.csv","r") stureader = csv.reader(fh) for rec in stureader: print(rec)</pre> <p>What will be the data type of rec?</p> <ol style="list-style-type: none"> string list tuple dictionary
21	<p>Which of the following is not a function/method of the csv module in Python?</p> <ol style="list-style-type: none"> read() reader() writer() writerow()
22	<p>Which one of the following is the default extension of a Python file?</p> <ol style="list-style-type: none"> .exe .p++ .py .p
23	<p>Which of the following symbol is used in Python for comments?</p> <ol style="list-style-type: none"> \$ @ // #
24	<p>Which of the following statements opens a binary file "record.bin" in write mode and writes an object <code>lst1 = [1,2,3,4]</code> on the binary file?</p> <ol style="list-style-type: none"> with <code>open('record.bin','wb')</code> as myfile: <code>pickle.dump(lst1,myfile)</code> with <code>open('record.bin','wb')</code> as myfile: <code>pickle.dump(myfile,lst1)</code> with <code>open('record.bin','wb+')</code> as myfile: <code>pickle.dump(myfile,lst1)</code> with <code>open('record.bin','ab')</code> as myfile: <code>pickle.dump(myfile,lst1)</code>
25	<p>Which of the following statements is false in the context of dictionary?</p> <ol style="list-style-type: none"> The values of a dictionary can be accessed using keys. The keys of a dictionary can be accessed using values. Elements in a dictionary are in form of key:value pairs. Dictionaries are mutable.

Section-B

This section consists of 24 Questions (26 to 49). Attempt any 20 questions.

26

What is the output of the following code?

```
T=(100)
print(T*2)
```

- a. Syntax error
- b. (200,)
- c. 200
- d. (100,100)

27

Suppose the content of `Myfile.txt` is:

Twinkle twinkle little star
How I wonder what you are
Up above the world so high
Like a diamond in the sky

What will be the output of the following code?

```
myfile = open("Myfile.txt")
data = myfile.readlines()
print(len(data))
myfile.close()
```

- a. 3
- b. 4
- c. 106
- d. 22

28

Identify the output of the following Python statements.

```
x = [[10.0, 11.0, 12.0],[13.0, 14.0, 15.0]]
y = x[1][2]
print(y)
```

- a. 11.0
- b. 12.0
- c. 14.0
- d. 15.0

29

Identify the output of the following Python statements.

```
x = 2
while x < 9:
    print(x, end='')
    x = x + 1
```

- a. 12345678
- b. 3456789
- c. 2345678
- d. 23456789

30	<p>Identify the output of the following Python statements.</p> <pre> b = 1 for a in range(1, 10, 2): b += a + 2 print(b) </pre> <p>a. 31 b. 33 c. 36 d. 39</p>																								
31	<p>Identify the output of the following Python statements.</p> <pre> lst1 = [10, 15, 20, 25, 30] lst1.insert(3, 4) lst1.insert(2, 3) print (lst1[-5]) </pre> <p>a. 2 b. 3 c. 4 d. 20</p>																								
32	<p>Raghav is trying to write an object obj1 = (1,2,3,4,5) on a binary file "test.bin". Consider the following code written by him.</p> <pre> import pickle obj1 = (1,2,3,4,5) myfile = open("test.bin", 'wb') pickle._____ #Statement 1 myfile.close() </pre> <p>Identify the missing code in Statement 1.</p> <p>a. dump(myfile,obj1) b. dump(obj1, myfile) c. write(obj1,myfile) d. load(myfile,obj1)</p>																								
33	<p>The content of a binary file "employee.dat" is shown below where the Header is not a part of file content (i.e only Row1 to Row5 are present in the file)</p> <table border="1" data-bbox="568 1675 1153 1921"> <tr> <td>Header →</td> <td>Empno</td> <td>Empname</td> <td>Salary</td> </tr> <tr> <td>Row1 →</td> <td>101</td> <td>Anuj</td> <td>50000</td> </tr> <tr> <td>Row2 →</td> <td>102</td> <td>Arijita</td> <td>40000</td> </tr> <tr> <td>Row3 →</td> <td>103</td> <td>Hanika</td> <td>30000</td> </tr> <tr> <td>Row4 →</td> <td>104</td> <td>Firoz</td> <td>60000</td> </tr> <tr> <td>Row5 →</td> <td>105</td> <td>Vijaylakshmi</td> <td>40000</td> </tr> </table>	Header →	Empno	Empname	Salary	Row1 →	101	Anuj	50000	Row2 →	102	Arijita	40000	Row3 →	103	Hanika	30000	Row4 →	104	Firoz	60000	Row5 →	105	Vijaylakshmi	40000
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Row5 →	105	Vijaylakshmi	40000																						

```

def display(eno):
    f=open("employee.dat","rb")
    totSum=0
    try:
        while True:
            R=pickle.load(f)
            if R[0]==eno:
                _____ #Line1
                totSum=totSum+R[2]
    except:
        f.close()
    print(totSum)

```

When the above-mentioned function, display (103) is executed, the output displayed is 190000. Which of the following statement should be used in the blank space of the line marked as Line1 to obtain the above output?

- a. jump
- b. break
- c. continue
- d. return

34 What will be the output of the following Python code?

```

def add (num1, num2):
    sum = num1 + num2
sum = add(20,30)
print(sum)

```

- a. 50
- b. 0
- c. Null
- d. None

35 Evaluate the following expression and identify the correct answer.

$16 - (4 + 2) * 5 + 2**3 * 4$

- a. 54
- b. 46
- c. 18
- d. 32

36 What will be the output of the following code?

```

def my_func(var1=100, var2=200):
    var1+=10
    var2 = var2 - 10
    return var1+var2
print(my_func(50),my_func())

```

- a. 100 200
- b. 150 300
- c. 250 75
- d. 250 300

37	<p>What will be the output of the following code?</p> <pre> value = 50 def display(N): global value value = 25 if N%7==0: value = value + N else: value = value - N print(value, end="#") display(20) print(value) </pre> <p>a. 50#50 b. 50#5 c. 50#30 d. 5#50#</p>
38	<p>Which of the following options can be the output for the following code?</p> <pre> import random List=["Delhi", "Mumbai", "Chennai", "Kolkata"] for y in range(4): x = random.randint(1,3) print(List[x],end="#") </pre> <p>a. Delhi#Mumbai#Chennai#Kolkata# b. Mumbai#Chennai#Kolkata#Mumbai# c. Mumbai# Mumbai #Mumbai # Delhi# d. Mumbai# Mumbai #Chennai # Mumbai</p>
39	<p>What is the output of the following code snippet?</p> <pre> def ChangeVal(M,N): for i in range(N): if M[i]%5 == 0: M[i]//=5 if M[i]%3 == 0: M[i]//=3 L = [25, 8, 75, 12] ChangeVal(L, 4) for i in L: print(i, end="#") </pre> <p>a) 5#8#15#4# b) 5#8#5#4# c) 5#8#15#14# d) 5#18#15#4#</p>
40	<p>Suppose the content of "Myfile.txt" is</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>Humpty Dumpty sat on a wall Humpty Dumpty had a great fall All the king's horses and all the king's men Couldn't put Humpty together again</p> </div>

	<p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") record = myfile.read().split() print(len(record)) myfile.close() </pre> <p>a. 24 b. 25 c. 26 d. 27</p>
41	<p>Find the output of the following code:</p> <pre> Name="PythoN3@1" R="" for x in range(len(Name)): if Name[x].isupper(): R=R+Name[x].lower() elif Name[x].islower(): R=R+Name[x].upper() elif Name[x].isdigit(): R=R+Name[x-1] else: R=R+"#" print(R) </pre> <p>a. pYTHOn##@ b. pYTHOnN#@ c. pYTHOn#@ d. pYTHOnN@#</p>
42	<p>Suppose the content of "Myfile.txt" is</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>Honesty is the best policy.</p> </div> <p>What will be the output of the following code?</p> <pre> myfile = open("Myfile.txt") x = myfile.read() print(len(x)) myfile.close() </pre> <p>a. 5 b. 25 c. 26 d. 27</p>
43	<p>Suppose the content of "Myfile.txt" is</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p>Humpty DUMPTY sat on a wall Humpty DUMPTY had a great fall All the king's horses and all the king's men Couldn't put Humpty together again</p> </div>

	<p>What will be the output of the following code?</p> <pre>myfile = open("Myfile.txt") x = myfile.read().lower() y = x.count('umpty') print(y) myfile.close()</pre> <p>a. 2 b. 3 c. 4 d. 5</p>
44	<p>What will be the output of the following code?</p> <pre>x = 3 def myfunc(): global x x+=2 print(x, end=' ') print(x, end=' ') myfunc() print(x, end=' ')</pre> <p>a. 3 3 3 b. 3 5 3 c. 3 3 5 d. 3 5 5</p>
45	<p>Suppose the content of "Myfile.txt" is</p> <div style="border: 1px solid black; padding: 5px; display: inline-block; margin: 10px auto; width: fit-content;">Ek Bharat Shreshtha Bharat</div> <p>What will be the output of the following code?</p> <pre>myfile = open("Myfile.txt") vlist = list("aeiouAEIOU") vc=0 x = myfile.read() for y in x: if(y in vlist): vc+=1 print(vc) myfile.close()</pre> <p>a. 6 b. 7 c. 8 d. 9</p>

46

Suppose the content of "Myfile.txt" is

```
Twinkle twinkle little star
How I wonder what you are
Up above the world so high
Like a diamond in the sky
Twinkle twinkle little star
```

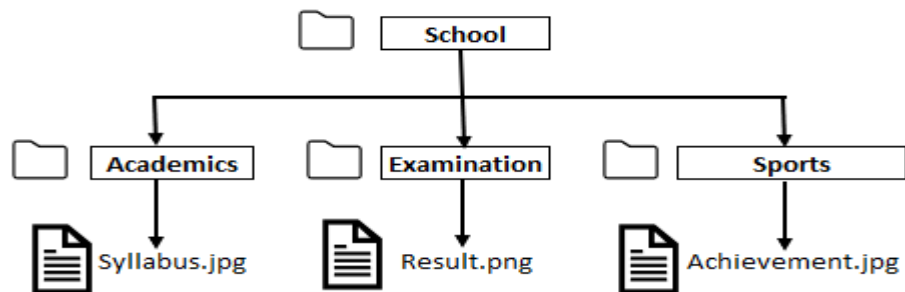
What will be the output of the following code?

```
myfile = open("Myfile.txt")
line_count = 0
data = myfile.readlines()
for line in data:
    if line[0] == 'T':
        line_count += 1
print(line_count)
myfile.close()
```

- a. 2
- b. 3
- c. 4
- d. 5

47

Consider the following directory structure.



Suppose root directory (School:\) and present working directory are the same. What will be the absolute path of the file Syllabus.jpg?

- a. School/Syllabus.jpg
- b. School/Academics/Syllabus.jpg
- c. School/Academics/../Syllabus.jpg
- d. School/Examination/Syllabus.jpg

48	<p>Assume the content of the text file "Myfile.txt" is:</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> Arjun Kumar Ismail Khan Joseph B Hanika Kiran </div> <p>What will be the data type of data_rec?</p> <pre>myfile = open("Myfile.txt") data_rec = myfile.readlines() myfile.close()</pre> <p>a. string b. list c. tuple d. dictionary</p>
49	<p>What will be the output of the following code?</p> <pre>tup1 = (1,2,[1,2],3) tup1[2][1]=3.14 print(tup1)</pre> <p>a. (1,2,[3.14,2],3) b. (1,2,[1,3.14],3) c. (1,2,[1,2],3.14) d. Error Message</p>
Section-C Case Study based Questions	
This section consists of 6 Questions (50 -55) Attempt any 5 questions.	
	<p>Rohit, a student of class 12, is learning csv module in Python. During the examination, he has been given a stub Python program (shown below) to create a CSV File "Student.csv" (content shown below). Help him in completing the code which creates the desired CSV File.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> CSV File 1,AKSHAY,XII,A 2,ABHISHEK,XII,A 3,ARVIND,XII,A 4,RAVI,XII,A 5,ASHISH,XII,A </div> <p>Incomplete Code</p> <pre>import _____ #Statement-1 fh = open(_____, _____, newline=") #Statement-2 stuwriter = csv._____ #Statement-3 data = [] header = ['ROLL_NO', 'NAME', 'CLASS', 'SECTION']</pre>

	<pre> data.append(header) for i in range(5): roll_no = int(input("Enter Roll Number : ")) name = input("Enter Name : ") Class = input("Enter Class : ") section = input("Enter Section : ") rec = [_____] #Statement-4 data.append(_____) #Statement-5 stuwriter. _____ (data) #Statement-6 fh.close() </pre>
50	<p>Identify the suitable code for blank space in the line marked as Statement-1.</p> <ul style="list-style-type: none"> a) csv file b) CSV c) csv d) csv module
51	<p>Identify the missing code for blank space in the line marked as Statement-2.</p> <ul style="list-style-type: none"> a) "Student.csv", "wb" b) "Student.csv", "w" c) "Student.csv", "r" d) "Student.csv", "rb"
52	<p>Choose the function name (with argument) that should be used in the line marked as Statement-3.</p> <ul style="list-style-type: none"> a) reader(fh) b) reader(MyFile) c) writer(fh) d) writer(MyFile)
53	<p>Identify the suitable code for the blank space in Statement-4.</p> <ul style="list-style-type: none"> a) 'ROLL_NO', 'NAME', 'CLASS', 'SECTION' b) ROLL_NO, NAME, CLASS, SECTION c) 'roll_no', 'name', 'Class', 'section' d) roll_no, name, Class, section
54	<p>Identify the suitable code for blank space in Statement-5.</p> <ul style="list-style-type: none"> a) data b) record c) rec d) insert
55	<p>Choose the function name that should be used in the blank space of the line marked as Statement-6 to create the desired CSV File?</p> <ul style="list-style-type: none"> a) dump() b) load() c) writerows() d) writerow()