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, consist of 25 Questions (1-25). Attempt any 20 questions.**
- **Section B, consist of 24 Questions (26-49). Attempt any 20 questions.**
- **Section C, consist 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 a declaration L = (1, 'Python', '3.14'). Which of the following represents the data type of L? a. list b. tuple c. dictionary d. string
3	Given a Tuple tup1= (10, 20, 30, 40, 50, 60, 70, 80, 90). What will be the output of print (tup1 [3:7:2])? a. (40,50,60,70,80) b. (40,50,60,70) c. [40,60] d. (40,60)
4	Which of the following option 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'); myfile.read() b. myfile = open('Myfile.txt','r'); myfile.read(n) c. myfile = open('Myfile.txt'); myfile.readline() d. myfile = open('Myfile.txt'); myfile.readlines()

6	Assume that the position of the file pointer is at the beginning of 3rd line in a text file. Which of the following option can be used to read all the remaining lines? a. myfile.read() b. myfile.read(n) c. myfile.readline() d. myfile.readlines()
7	A text file student.txt is stored in the storage device. Identify the correct option out of the following options to open the file in read mode. i. myfile = open('student.txt','rb') ii. myfile = open('student.txt','w') iii. myfile = open('student.txt','r') iv. myfile = open('student.txt') a. only i b. both i and iv c. both iii and iv d. both i and iii
8	The return type of the input() function is a. string b. integer c. list d. tuple
9	Which of the following operator cannot be used with string data type? a. + b. in c. * d. /
10	Consider a tuple tup1 = (10, 15, 25, and 30). Identify the statement that will result in an error. a. print(tup1[2]) b. tup1[2] = 20 c. print(min(tup1)) d. print(len(tup1))
11	Which of the following statement is incorrect in the context of binary files? a. Information is stored in the same format in which the information is held in memory. b. No character translation takes place c. Every line ends with a new line character d. pickle module is used for reading and writing
12	What is the significance of the tell() method? a. tells the path of 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	Which of the following statement is true? 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	Syntax of seek function in Python is myfile.seek(offset, reference_point) where myfile is the file object. What is the default value of reference_point? a. 0 b. 1 c. 2 d. 3
15	Which of the following components are part of a function header in Python? a. Function Name b. Return Statement c. Parameter List d. Both a and c
16	Which of the following function header is correct? a. def cal_si(p=100, r, t=2) b. def cal_si(p=100, r=8, t) c. def cal_si(p, r=8, t) d. def cal_si(p, r=8, t=2)
17	Which of the following is the correct way to call a function? a. my_func() b. def my_func() c. return my_func d. call my_func()
18	Which of the following character acts as default delimiter in a csv file? a. (colon) : b. (hyphen) - c. (comma) , d. (vertical line) |
19	Syntax for opening Student.csv file in write mode is myfile = open("Student.csv","w",newline=''). What is the importance of newline=''? a. A newline gets added to the file b. Empty string gets appended to the first line. c. Empty string gets appended to all lines. d. EOL translation is suppressed
20	What is the correct expansion of CSV files? a. Comma Separable Values b. Comma Separated Values c. Comma Split Values d. Comma Separation Values

21	Which of the following is not a function / method of csv module in Python? a. read() b. reader() c. writer() d. writerow()
22	Which one of the following is the default extension of a Python file? a. .exe b. .p++ c. .py d. .p
23	Which of the following symbol is used in Python for single line comment? a. / b. /* c. // d. #
24	Which of the following statement opens a binary file record.bin in write mode and writes data from a list lst1 = [1,2,3,4] on the binary file? a. with open('record.bin','wb') as myfile: pickle.dump(lst1,myfile) b. with open('record.bin','wb') as myfile: pickle.dump(myfile,lst1) c. with open('record.bin','wb+') as myfile: pickle.dump(myfile,lst1) d. with open('record.bin','ab') as myfile: pickle.dump(myfile,lst1)
25	Which of these about a dictionary is false? a) The values of a dictionary can be accessed using keys b) The keys of a dictionary can be accessed using values c) Dictionaries aren't ordered d) Dictionaries are mutable
	Section-B
	This section consists of 24 Questions (26 to 49). Attempt any 20 questions.

26	What is the output of following code:
	`T=(100)`
	`print(T*2)`
	a. Syntax error
	b. (200,)
	c. 200
	d. (100,100)

27	Suppose 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. 5
	d. 6

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. 12.0
	b. 13.0
	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. 123456789
	c. 2345678
	d. 23456789

30	Identify the output of the following Python statements.
	`b = 1`
	`for a in range(1, 10, 2):`
	`  b += a + 2`
	`print(b)`
	a. 31
	b. 33
	c. 36
	d. 39

31 Identify the output of the following Python statements.

```
lst1 = [10, 15, 20, 25, 30]
lst1.insert( 3, 4)
lst1.insert( 2, 3)
print (lst1[-5])
```

a. 2
b. 3
c. 4
d. 20

32 Raghav is trying to write a tuple tup1 = (1,2,3,4,5) on a binary file **test.bin.** Consider the following code written by him.

```
import pickle
tup1 = (1,2,3,4,5)
myfile = open("test.bin",'wb')
pickle._______ #Statement 1
myfile.close()
```

Identify the missing code in Statement 1.

a. dump(myfile,tup1)
b. dump(tup1, myfile)
c. write(tup1,myfile)
d. load(myfile,tup1)

33 A binary file employee.dat has following data

Empno	empname	Salary
101	Anuj	50000
102	Arijita	40000
103	Hanika	30000
104	Firoz	60000
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.
Write appropriate jump statement from the following 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	What will be the output of the following code?
	`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)`
	a. 50#50
	b. 50#5
	c. 50#30
	d. 5#50#

38	What will be the output of the following code?
	`import random`
	`List=["Delhi","Mumbai","Chennai","Kolkata"]`
	`for y in range(4):`
	`  x = random.randint(1,3)`
	`  print(List[x],end="#")`
	a. Delhi#Mumbai#Chennai#Kolkata#
	b. Mumbai#Chennai#Kolkata#Mumbai#
	c. Mumbai# Mumbai #Mumbai # Delhi#
	d. Mumbai# Mumbai #Chennai # Mumbai

39	What is the output of the following code snippet?
	`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="#")`
	a) 5#8#15#4#
	b) 5#8#5#4#
	c) 5#8#15#14#
	d) 5#18#15#4#

40	Suppose content of 'Myfile.txt' is
	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
	What will be the output of the following code?
	`myfile = open("Myfile.txt")`
	`record = myfile.read().split()`
	`print(len(record))`
	`myfile.close()`
	a. 24
	b. 25
	c. 26
	d. 27

41	Find the output of the following code:
	`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)
```

a. pYTHOn##@
b. pYTHOnN#@
c. pYTHOn#@
d. pYTHOnN@#

42 Suppose content of 'Myfile.txt' is

Honesty is the best policy.

What will be the output of the following code?

```
myfile = open("Myfile.txt")
x = myfile.read()
print(len(x))
myfile.close()
```

a. 5
b. 25
c. 26
d. 27

43 Suppose content of 'Myfile.txt' is

Culture is the widening of the mind and of the spirit.

What will be the output of the following code?

```
myfile = open("Myfile.txt")
x = myfile.read()
y = x.count('the')
print(y)
myfile.close()
```

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

44 What will be the output of the following code?

```
x = 3
def myfunc():
   global x
   x+=2
   print(x, end=' ')
print(x, end=' ')
myfunc()
print(x, end=' ')
```

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

45 Suppose content of 'Myfile.txt' is

```
Ek Bharat Shreshtha Bharat
```

What will be the output of the following code?

```
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()
```

a. 6
b. 7
c. 8
d. 9

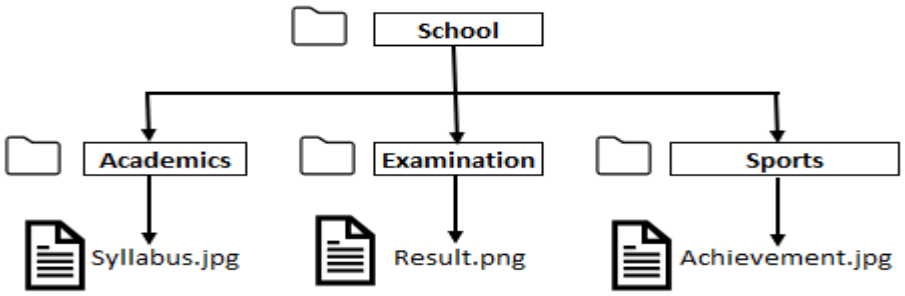
46 Suppose content of 'Myfile.txt' is

```
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	Assume the content of text file, 'student.txt' is:
	Arjun Kumar
	Ismail Khan
	Joseph B
	Hanika Kiran
	What will be the data type of data_rec?
	`myfile = open("Myfile.txt")`
	`data_rec = myfile.readlines()`
	`myfile.close()`
	a. string
	b. list
	c. tuple
	d. dictionary

49	What will be the output of the following code?
	`tup1 = (1,2,[1,2],3)`
	`tup1[2][1]=3.14`
	`print(tup1)`
	a. (1,2,[3.14,2],3)
	b. (1,2,[1,3.14],3)
	c. (1,2,[1,2],3.14)
	d. Error Message

	Section-C **Case Study based Questions**
	This section consists of 6 Questions (50 -55) Attempt any 5 questions.

	Rohit, a student of class 12, is learning CSV File Module in Python. During examination, he has been assigned an incomplete python code (shown below) to create a CSV File 'Student.csv' (content shown below). Help him in completing the code which creates the desired CSV File.
	
	CSV File
	1,AKSHAY,XII,A
	2,ABHISHEK,XII,A
	3,ARVIND,XII,A
	4,RAVI,XII,A
	5,ASHISH,XII,A
	
	Incomplete Code
	
	import _____ #Statement-1
	fh = open(_____, _____, newline='') #Statement-2
	stuwriter = csv._____ #Statement-3
	data = [ ]
	header = ['ROLL_NO', 'NAME', 'CLASS', 'SECTION']
	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()

50	Identify the suitable code for blank space in the line marked as Statement-1. a) csv file b) CSV c) csv d) cvs
51	Identify the missing code for blank space in line marked as Statement-2. a) "Student.csv","wb" b) "Student.csv","w" c) "Student.csv","r" d) "Student.cvs","r"
52	Choose the function name (with argument) that should be used in the blank space of line marked as Statement-3. a) reader(fh) b) reader(MyFile) c) writer(fh) d) writer(MyFile)

53	Identify the suitable code for blank space in line marked as Statement-4. 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	Identify the suitable code for blank space in the line marked as Statement-5. a) data b) record c) rec d) insert
55	Choose the function name that should be used in the blank space of line marked as Statement-6 to create the desired CSV File? a) dump() b) load() c) writerows() d) writerow()

Marking Scheme

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Computer Science (Code 083)

1	d. pass
2	b. tuple
3	d. (40,60)
4	b. if we try to read a text file that does not exist, the file gets created.
5	c. myfile = open('Myfile.txt'); myfile.readline()
6	d. myfile.readlines()
7	c. both iii and iv
8	a. string
9	d. /
10	b. tup1[2] = 20
11	c. Every line ends with a new line character
12	b. tells the current position of the file pointer within the file
13	b. pickling is used for object serialization
14	a. 0
15	d. Both a and c
16	d. def cal_si(p, r=8, t=2)
17	a. my_func()
18	c. ,
19	d. EOL Translation is suppressed
20	b. Comma Separated Values
21	a. read()
22	c. .py
23	d. #
24	a. with open('record.bin','wb') as myfile: pickle.dump(lst1,myfile)
25	b. The keys of a dictionary can be accessed using values
26	c. 200
27	b. 4
28	d. 15.0
29	c. 2345678
30	c. 36
31	b. 3
32	b. dump(tup1, myfile)
33	c. continue
34	d. None
35	c. 18
36	d. 250 300
37	b. 50#5
38	b. Mumbai#Chennai#Kolkata#Mumbai#
39	b. 5#8#5#4#
40	c. 26
41	b. pYTHOnN#@
42	d. 27

43	b. 3
44	d. 3 5 5
45	b. 7
46	a. 2
47	b. School/Academics/syllabus.jpg
48	b. list
49	b. (1,2,[1,3.14],3)
50	c. csv
51	b. "Student.csv","w"
52	c. writer(fh)
53	d. roll_no,name,Class,section
54	c. rec
55	c. writerows()