



FIRST TERM EXAMINATION (2021-22)

Subject: COMPUTER SCIENCE

Max. Marks:35

Grade: XII

Time: 90 Minutes

Name:

Section:

Roll No:

General Instructions:

- This question paper consists of 9 printed pages.
- All answers to be written in the OMR answer sheet provided.
- 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.

SECTION A

This section consists of 25 Questions (1 to 25). Attempt any 20 questions from this section. Choose the best possible option.

- Find the invalid identifier from the following
 - My_string_1
 - 1st_string
 - foo
 - _
- Suppose a list L is declared as L=["10",12,"43",39] , which of the following is incorrect
 - print(L[1])
 - L[2]="12"
 - print(max(L))
 - L.append(40)
- Given a Tuple tup1= (10, 20, 30, 40, 50, 60, 70, 80, 90).
X=list(tup1)
What will be the output of print (X [3:7:2])?
 - (40,50,60,70,80)
 - (40,50,60,70)
 - [40,60]
 - (40,60)
- Which of the following option is not correct?
 - if we try to open a text file using r+ it will create the file that does not exist.
 - if we try to open a text file using w+, then an exception raised.
 - if we try to write on a text file that does not exist, no error occurs.
 - if we try to open a text file using a+, if does not exist, the file gets Created.
- Which of the following options can be used to read two bytes from a file object infile?
 - infile.read(0,2)
 - infile.read(2)
 - infile.readline()
 - infile.read()
- To open a file c:\newfolder\temp.txt for reading, we us
 - Myfile=open('c:\newfolder\temp.txt','r')
 - Myfile=open('c:\\newfolder\\temp.txt')
 - Myfile=File('c:\newfolder\temp.txt')
 - Myfile=open(('c:\newfolder\temp.txt','r+'))
- It determines the mode in which the file has to be opened
 - filename
 - Accessmode
 - pickle
 - Dump

8. Given a function that does not return any value, what value is thrown by default when executed in shell
 - a. int
 - b. None
 - c. void
 - d. none
9. Which of the following command will create a list?
 - a. L=list()
 - b. L=[]
 - c. L=list([1,2,3])
 - d. All of the above
10. Consider a tuple tup1 = ('A', 'a', 'z', '9').What is min(tup1)?
 - a. A
 - b. A
 - c. Z
 - d. 9
11. It is the process by which a python object is converted to a byte stream
 - a. Unpickling
 - b. Loading
 - c. Dumping
 - d. Pickling
12. The syntax of dump() method
 - a. dump(L,outfile)
 - b. pickle.dump(L,outfile)
 - c. dump(outfile,L)
 - d. pickle.dump(outfile,L)
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. How do you tell the current file position
 - a. tell()
 - b. get()
 - c. offset()
 - d. None of the mentioned
15. Which of the following is the use of id() function in Python
 - a. Returns the size of the object
 - b. Returns the identity of the object
 - c. Both (a) and (b)
 - d. None of the above
16. Which of the following function header is correct?
 - a. def fun(a=100, b, c=2)
 - b. def fun(a=100, b=8, c)
 - c. def fun(a, b=8, c)
 - d. def fun(a, b=8, c=2)
17. What is a variable defined outside a function referred to as
 - a. local variable
 - b. global variable
 - c. static variable
 - d. automatic variable
18. Which one of the following is incorrect?
 - a. The variables inside function are called local variables.
 - b. The local variables of a particular function can be used inside other functions, but these can not be used in global space
 - c. The variables outside functions are called global variable.
 - d. In order to change the value of global variable inside a function , keyword global is used.
19. Which one of the following is correct?
 - a. A dictionary can have two same keys with different values.
 - b. A dictionary can have two same values with different keys.
 - c. A dictionary can have two same keys or same values but can not have the same key-value pair
 - d. A dictionary can neither have two same keys nor two same values
20. D1={"abc":50,"def":6,"ghi":7}
print(D1[0])

- a. abc
 - b. ("abc",50)
 - c. {"abc":50}
 - d. Error
21. To read 4th line from text file, which of the following statement is true?
- a. dt = f.readlines();print(dt[3])
 - b. dt=f.read(4) ;print(dt[3])
 - c. dt=f.readline(4);print(dt[3])
 - d. All of these
22. EOL stands for
- a. End Of Line
 - b. End Of List
 - c. End of Lines
 - d. End Of Location
23. Which of the following symbol is used to perform reading as well as writing on files in python.
- a. +
 - b. /
 - c. *
 - d. in
24. To add data into an existing file _____ mode is used.
- a. Extend
 - b. append
 - c. Add
 - d. more
25. Which of the following is not a proper file access mode?
- a. Close
 - b. read
 - c. Write
 - d. append

SECTION B

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

26. What is the output of following code:
- ```
T=(3+5,)
print(T*2)
```
- a. Syntax error
  - b. (8,)
  - c. (8,8)
  - d. 8
27. Suppose content of 'Myfile.txt' is:
- Friends are crazy, Friends are naughty !  
 Friends are honest, Friends are best !  
 Friends are like keygen, friends are like license key !  
 We are nothing without friends, Life is not possible without friends !  
 What will be the output of the following code?
- ```
myfile = open("Myfile.txt")
data = myfile.readlines()[0]
print(len(data))
myfile.close()
```
- a. 32
 - b. 40
 - c. 39
 - d. 68
28. Identify the output of the following Python statements.
- ```
def func(mess,num):
 while num>0:
 print(mess)
 num-=1
 func('Hi',3)
```
- a. HiHiHi
  - b. Hi  
Hi  
Hi  
Hi

- c. Error d. Infinite Loop
29. Identify the output of the following Python statements.
- ```
def python(guido,van,rosum):
    print(guido,van,rosum)
    return str(guido)+van*rosum
print(python(10,5,'4'))
```
- a. 1044444 b. 30
c. 60 d. 1054
30. Identify the output of the following Python statements.
- ```
lst=[3,4,6,1,2]
lst[1:2]=[7,8]
print(lst)
```
- a. Syntax error b. [3,[7,8],6,1,2]  
c. [3,7,8,6,1,2] d. [3,4,6,7,8]
31. Identify the output of the following Python statements.
- ```
x='abcd'
for i in x:
    print(i,end=' ')
x.upper()
```
- a. a B C D b. a b c d
c. A B C D d. Error
32. Identify the output of the following Python statements
- ```
first="python"
second="python"
print(first is second)
print(first==second)
lst1=[1,2,3,4]
lst2=[1,2,3,4]
print(lst1 is lst2)
print(lst1==lst2)
```
- a. False b. False  
True True  
False True  
True True  
c. True d. False  
True False  
False True  
True True
33. A binary file employee.dat has following data

| Empno | empname      | Salary |
|-------|--------------|--------|
| 101   | Anuj         | 50000  |
| 102   | Arijita      | 40000  |
| 103   | Hanika       | 30000  |
| 104   | Firoz        | 65000  |
| 105   | Vijaylakshmi | 40000  |

```
def display(): f=open("employee.dat","rb")
 totSum=0
 try:
 while True:
```

```

R=pickle.load(f)
if :----- # 1
 totSum=totSum+R[2]
except:
 f.close()
print(totSum)

```

When the above mentioned function, display () is executed, the output displayed is 90000.

Write appropriate statement from the following to obtain the above output.

- |               |                  |
|---------------|------------------|
| a. R[1]== 'A' | b. R[1][0]== 'A' |
| c. R== 'A'    | d. R[0][1]== 'A' |

34. In the following question, a statement of Assertion (A) is followed by a statement of Reason( R) . Mark the correct choice as  
 Assertion (A) : Built in functions are predefined in the language that are used directly  
 Reason (R) : print() and input() are built in functions

- |                                                                 |                                                                 |
|-----------------------------------------------------------------|-----------------------------------------------------------------|
| 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 correct explanation for A |
| c. A is true but R is false                                     | d. A is false but R is true                                     |

35. Evaluate the following expression and identify the correct answer.

```
print(math.ceil(1.03)+math.floor(1.03))
```

- |        |        |
|--------|--------|
| a. 3.0 | b. 3   |
| c. 2   | d. 2.0 |

36. What will be the output of the following code?

```

def test(a,b,c):
 return b*b-4*a*c
print(test(b=3,a=1,c=2))
p,q,r=4,2,5
print(test(c=p,b=q,a=r))

```

- |             |            |
|-------------|------------|
| a. 1<br>-76 | b. 1<br>76 |
| c. 1 76     | d. 1 -76   |

37. What will be the output of the following code?

```

def Changer(P,Q=10):
 P=P/Q
 Q=P%Q
 print(P,"#",Q)
 return P
A=200
B=20
B=Changer(B)
print(A,"$",B)
A=Changer(A)
print(A,"$",B)

```

- |                                                     |                                       |
|-----------------------------------------------------|---------------------------------------|
| a. 2.0#2.0<br>200\$2.0<br>20.0 # 0.0<br>20.0 \$ 2.0 | b. 2#2<br>200\$2<br>20 # 0<br>20 \$ 2 |
|-----------------------------------------------------|---------------------------------------|

- |    |                                        |    |                                          |
|----|----------------------------------------|----|------------------------------------------|
| c. | 2.0#2<br>200\$2.0<br>20.0#0<br>20\$2.0 | d. | 2.0#2<br>200\$2.0<br>20.0#0.0<br>20\$2.0 |
|----|----------------------------------------|----|------------------------------------------|

38. What will be the output of the following code?

```
from random import randint
LST=[5,10,15,20,25,30,35,40,45,50,60,70]
first=randint(3,8)-1
second=randint(4,9)-2
third=randint(6,11)-3
print(LST[first],LST[second],LST[third],sep='$')
```

- |    |              |    |              |
|----|--------------|----|--------------|
| a. | 20\$25\$25\$ | b. | 30\$40\$70\$ |
| c. | 15\$60\$70\$ | d. | 35\$40\$60\$ |

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

A boy is playing there. I love to eat pizza. A plane Is in the sky  
What will be the output of the following code?

```
myfile = open("Myfile.txt")
record = myfile.read().split()
print(record.count('is'))
myfile.close()
```

- |    |       |    |       |
|----|-------|----|-------|
| a. | 2     | b. | 1     |
| c. | None2 | d. | None0 |

41. Find the output of the following code:

```
str1="CBSE-EXAM"
str2=""
I=0
while I<len(str1)-1:
 if str1[I]>="A" and str1[I]<="M":
 str2=str2+str1[I+1]
 elif str1[I]>="0" and str1[I]<="9":
 str2=str2+str1[I-1]
 else:
 str2=str2+"*"
 I=I+1
print(str2)
```

- |    |            |    |           |
|----|------------|----|-----------|
| a. | BS*-*x***b | b. | BS*-*x*** |
|----|------------|----|-----------|

- c. BS\*-\*X\*\*  
d. BS\*-\*X\*M
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")
myfile.seek(4)
x = myfile.read(3)
print(x, len(x))
myfile.close()
```

a. sty,3  
b. Hon,3  
c. est,3  
d. es,3
43. Suppose content of 'Myfile.txt' is  
ABCD213XYZABMN  
What will be the output of the following code?  

```
myfile = open("Myfile.txt")
x = myfile.read()
y = x.find('AB',-5,-3)
print(y)
myfile.close()
```

a. 1  
b. -1  
c. -5  
d. 10
44. What will be the output of the following code?  

```
x=100
def func(b):
 x=3
 x=x+b+5
 print(x,end='%')
 x=2
 x+=20
 print(x,end='%')
 b+=3
a=25
func(a)
print(a)
```

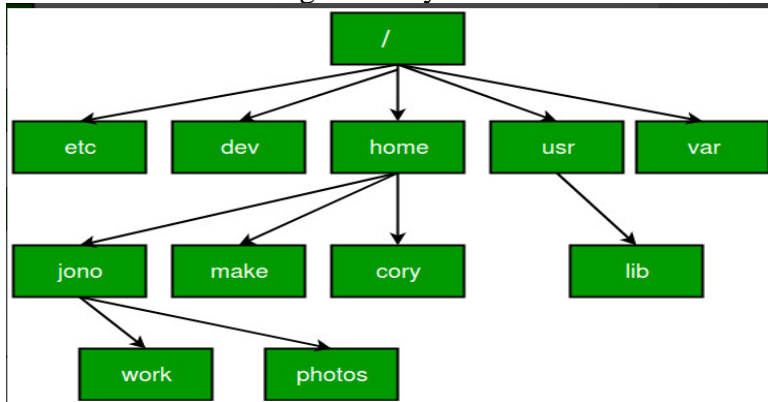
a. 33%22%25  
b. 130%150%28  
c. 33%22%28  
d. 130%150%25
45. Which exception occurs when the file does not exist  
a. FileNotFoundError  
b. FileError  
c. NotExists  
d. Error
46. What will be the output of the following code? Assume the content of the file "chk.txt" is  
This is file  
Handling in python  
Method to read  
It is fun  
To learn  

```
def test():
 file=open("chk.txt")
 s1=file.readline()
 s1=file.readline()
 s1=file.readline()
```

```
s2=file.read(4)
print(s2)
test()
```

- a. It i
- b. It is
- c. Meth
- d. Met

47. Consider the following directory structure.



Suppose root directory (School) and present working directory are the same. What will be the relative path of the file photos?

- a. /home/jono/photos
- b. jono/photos
- c. photos
- d. /photos

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.readline()
myfile.close()
```

- a. String
- b. List
- c. Tuple
- d. Dictionary

49. What will be the output of the following code?

```
tup1 = (1,2,3,4)
tup2 = (1,2,4,3)
print(tup1<tup2)
```

- a. True
- b. False
- c. Error
- d. Unexpected

### Section-C

#### Case Study based Questions

This section consists of 6 Questions (50 -55) Attempt any 5 questions.

Rama, a student of class 12, is learning Binary File Module in Python. During examination, he has been assigned an incomplete python code (shown below) to copy a Binary File 'Student.dat' (content shown below) to 'temp.dat' where the mark is above 75. Help her in completing the code which creates the desired binary File. Assume the data is stored in nested list format to Student file



### Student File

1,AKANSHA,XII,A,80  
2.MANTRA , XII B ,85  
2,ABHISHEK,XII,H,83  
3,ARPIT,XII,I,75  
4,SANYAM ,XII,J,92  
5,ASHIMA XII,A,95

### Incomplete Code

```
import _____ #Statement-1
infile=open('student.dat','rb')
outfile = open(_____)#Statement-2
data = _____ # Statement 3
for i in range(len(data)):
 _____#Statement-4
 _____#Statement-5
 _____#Statement-6
```

50. Identify the suitable code for blank space in the line marked as Statement-1
- Binary
  - pickle
  - uniform
  - File
51. Identify the missing code for blank space in line marked as Statement-2.
- "temp.dat","wb"
  - "temp.dat","w"
  - "temp.dat","ab"
  - "temp.dat","ab+"
52. Choose the function name (with argument) that should be used in the blank space of line marked as Statement-3.
- load(infile)
  - pickle.load(infile)
  - pickle.read(infile)
  - read(infile)
53. Identify the suitable code for blank space in line marked as Statement-4.
- if data[4]>75:
  - if data[0][4]>75:
  - if data[i][4]>75:
  - if data >75:
54. Identify the suitable code for blank space in the line marked as Statement-5.
- pickle.dump(outfile,data)
  - pickle.dump(outfile,data[i])
  - pickle.dump(data,outfile)
  - pickle.dump(data[i],outfile)
55. Choose the function name that should be used in the blank space of line marked as Statement-6 to store the data to temp.dat file?
- outfile.dump()
  - outfile.close()
  - infile.close()
  - infile.dump()

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