FIRST TERM EXAMINATION (2021-22)

Subject: COMPUTER SCIENCE	**Max. Marks: 35**
Grade: XII	**Time: 90 Minutes**

Name: **Section:**   **Roll No:**

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*
- *This question paper consists of 10 printed pages.*
- *All answers to be marked in the OMR sheet provided.*

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 odd one in the listed operators below.

   a. *=   b. >=
   c. **=   d. //=

2. What is the output of the following?
   S1="Python Programming"
   S1=S1[-4:-1]
   print(S1*2)

   a. minmin   b. mingming
   c. Error   d. No output

3. What is the output when following code is executed?
   def fncall(A):
       x=A+20
   print(fncall(150))

   a. 150   b. 170
   c. None   d. Error

4. Akhil want to create a Python Dictionary named Dictno with 10 keys 0…9, each having values as 500.Complete the code for him.
   L=[0,1,2,3,4,5,6,7,8,9]
   V=500
   Dictno=_____(L,V)
   print(Dictno)

   a. dict.fromkeys(L,V)   b. dict.setdefault(L,V)
   c. dict.copy(L,V)   d. dict.extend(L,V)

5. What will be the output of the following python program code
   a="Computer science with Python"
   print(a[-20:-5:-1])

     a. science with Python   **b.** nohtyP htiw ecneics
     c. Error   **d.** No output

6. Find the output of the following program segment:-
   list1=["Python","Java","c","C","c++"]
   print(max(list1))

     a. Python   b. c
     c. C   d. c++

7. Which statement will import the function sqrt() from math module
     a. import sqrt   b. import sqrt from math
     c. from math import sqrt   d. import math.sqrt()

8. Absolute path of a file starts from the _____
     a. Folder where file is present   b. Root directory
     c. Current directory   d. None of the options

9. In relative path ,_____ symbol is used to represent parent node
     a. (.)Single dot   .b (..)Double dot
     c. (\)Back slash   d. (/)Forward slash

10. Which of the option is a compile time error
      a. Syntax Error   b. Semantic Error
      c. Logical error   d. Both options a and b

11. Identify the valid identifier out of the following.
      a. item*qty   b. $price
      c. for   d. price_item

12. Which Python Library module needs to be imported to invoke the function median()
      a. math   b. calculus
      c. statistics   d. random

13. Which is the correct form of declaration of dictionary Day.
      a. Day={[1,2,5]:'Monday',[3,4,6]:'Tuesday'}   b. Day=(1:'Monday',2:'Tuesday')
      c. Day=[1:'Monday',2:'Tuesday']   d. Day={1:'Monday',2:'Tuesday'}

14. Which of the following block will be executed whether an exception is thrown or not?
      a. try   b. except
      c. else   d. finally

15. What happens when the statement print('1' == 1) is executed?
      a. True   b. False
      c. Value error   d. Type error

16. What happens if no arguments are passed to the seek() function?
      a. file position is set to the start of file   b. file position is set to the end of file
      c. file position remains unchanged   d. Error

17. Which statement is used to read all the data from the text file as a string

      a. file.read()   b. file.readline()
      c. file.readlines()   d. file.readall()

18. Which statement is used to remove the whitespaces from both ends of the string line.

a. line.strip()
b. line.split()
c. line.rstrip()
d. line.lstrip()

19. Which statement is correct to check if the length of the word c is greater than 5

a. c>5
b. range(c)>5
c. len(c)>5
d. c.len()>5

20. remove() function is included in which module

a. sys
b. os
c. math
d. pickle

21. How do you get the current position within the file connected using a file handle fin?

a. fin=tell()
b. fin=seek(cur)
c. fin.tell()
d. fin.seek(cur)

22. What is unpickling

a. It is used for object serialization
b. It is used for object deserialization
c. Both a and b
d. None of the options

23. The operator that has the highest precedence is _____

a. >>
b. **
c. *
d. %

24. The function that converts an integer to a string of one character whose ASCII code is same as the integer is _____

a. eval()
b. input()
c. ord()
d. chr()

25. Which of the following cannot be used as a key in Python dictionaries

a. Strings
b. Lists
c. Tuples
d. Numeric values

<div align="center">**Section B**</div>

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

26. Deduce the output of the following code.
```
if False and False:
    print("And Operation")
elif True or False:
    print("Or operation")
else:
    print("Default case")
```
a. And operation
b. Or operation
c. Default case
d. Both b and c

27. What will be the output of the following statement assuming math module is imported
```
print (math.fabs(math.floor(-25.6)))
```
a. 25
b. 25.0
c. 26
d. 26.0

28. What will be the output of the following statement assuming math module is imported
```
print(abs(math.ceil(144.45)))
```

a. 144   b. 144.0

c. 145   d. 145.0

29. Rohan declared a tuple mytup and coded the program given below. Guess the minimum value for K so exception handling will print the IndexError message.

mytup=(32,93,45,71,-89,111,100)

try:

   for i in range(K):

     print(mytup[i])

except IndexError:

   print("It's out of range now so stop")

a. 6   b. 7

c. 8   d. 9

30. Your teacher has given you a method filterwords() in python which reads lines from a text file "Novel.txt" and displays those words which are greater than 5 characters .Your teacher asked you to fill the blank in Statement 1 so that the code will run to find the desired result.

```
def filterwords():
          _____ open("Novel.txt") as file:    # Statement 1
        line=file.readlines()
        word=line.split()
        for c in word:
            if len(c)>5:
                print(c)
```

a. file=   b. with

c. pickle.   d. No of the options

31. Rohan wrote a function sumarg() to find the sum of the two arguments

```
def sumarg(arg1,arg2):
    total=arg1+arg2
    print(total)
 sumarg(arg2=10,arg1=20))
```

What type of arguments are arg1 and arg2 in the function call statement.

a. Default Arguments   b. Relative Arguments

c. Positional Arguments   d. Keyword Arguments

32. The output of the following code is _____

print("Apple is a fruit".split("is"))

a. [' a fruit']   b. ['Apple','a fruit']

c. ['Apple ',' a fruit']   d. ['Apple']

33. Find the output of the following code:

count={}

count[(1,2,4)]=5

count[(4,6)]=2

count[(1,2,3)]=7

count[(6,7,8)]=6

tot=0

for i in count:

   tot=tot+count[i]

print(len(count)+tot)

a. 24   b. 25

c. 20   d. Error

34. Find the output of the following code:

Data=[[[1,2],[3,4]],[[5,6],[7,8]]]

print(Data[1][0][0])

a. 1   b. 2

c. 4   d. 5

35. Assume tuple_1 = (7,8,9,10,11,12,13) then the output of tuple_1[1:-1] is _____

a. Error   b. No output

c. (8,9,10,11,12,13)   d. (8,9,10,11,12)

36. What is the output of the below program?

def func(a, b=5, c=10):

    print('a is', a, 'and b is', b, 'and c is', c)

func(3, 7)

func(25, c = 24)

func(c = 50, a = 100)

a. a is 7 and b is 3 and c is 10   b. a is 3 and b is 7 and c is 10

   a is 25 and b is 5 and c is 24   a is 5 and b is 25 and c is 24

   a is 5 and b is 100 and c is 50   a is 50 and b is 100 and c is 5

c. a is 3 and b is 7 and c is 10   d. None of the options

   a is 25 and b is 5 and c is 24

   a is 100 and b is 5 and c is 50

37. What is the output of the following piece of code?

def a(b):

  b = b + [5]

c = [1, 2, 3, 4]

a(c)

print(len(c))

a. 4   b. 5

c. 2   d. 1

38. What is the output of the following code?

def foo(i, x=[]):

  x.append(i)

  return x

for i in range(3):

  print(foo(i))

a. [0][1][2]   b. [0][0,1][0,1,2]

c. [1][2][3]   d. [1][1,2][1,2,3]

39. The output of code shown below is _____

x = 5

def f1():

  global x

  x = 4

def f2(a,b):

  global x

```
return a+b+x
f1()
total = f2(1,2)
print(total)
```
a. 7
b. 8
c. 15
d. Error

40. Which of the following is a possible outcome of the function shown below?
`random.randrange(0,95,5)`
a. 10
b. 18
c. 79
d. 95

41. Rohit is trying to write a tuple T1 on a binary file Sample.dat. Consider the code written by him.
```
import pickle
T1 = ('A','B','C','D')
fin = open("Sample.dat",'wb')
pickle._____ #Statement 1
fin.close()
```
Identify the missing code in Statement 1.
a. dump(myfile,tup1)
b. dump(tup1, myfile)
c. write(tup1,myfile)
d. load(myfile,tup1)

a. dump(fin,T1)
b. dump(T1,fin)
c. write(T1,fin)
d. load(T1,fin)

42. A binary file Movie.dat has following data

Movieno	Moviename	Duration (in minutes)
M018	Gone with the wind	120
M178	Mr Butler	145
M345	Ugly Duckling	90
M083	Travel Series	100

```
def SumDuration(Mname):
    f=open("Movie.dat","rb")
    Sumdur=0
    try:
      while True:
        R=pickle.load(f)
        if R[1]==Mname:
            _____ #Line1
        Sumdur=Sumdur+R[2]
    except:
        f.close()
    print(Sumdur)
```
When the above mentioned function, SumDuration("Ugly Duckling") is executed, the output displayed is 365.

Write appropriate statement for Line 1 from the following to obtain the above output

a. break
b. continue
c. pass
d. return

43. Evaluate the expression and predict the output

x=2+3*4**2//5%2+6

a. 6
b. 11
c. 9
d. None of the options

44. Predict the correct option from the choices given

import random
Dict={1:['Red','Green'],2:['Apple','Grapes'],3:['Glass','Plate']}
for i in range(3):
  x = random.randint(1,3)
  print(Dict[x][1],end="&")

a. Red&Apple&Plate&
b. Plate&Green&Grapes
c. Grapes&Glass&Red
d. Green&Plate&Plate&

45. Find the output:

Word="Python 3.1V"
R=""
for x in range(len(Word)):
  if Word[x].isalpha():
    if Word[x].islower():
      R=R+Word[x-1].upper()
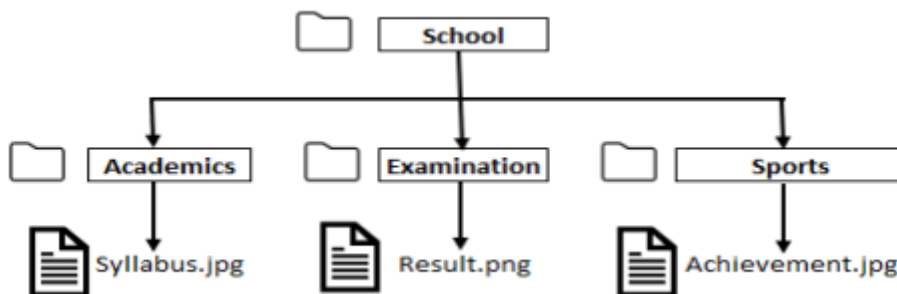   elif Word[x].isupper():
      R=R+Word[x]
  elif Word[x].isdigit():
    R=R+Word[x-2]
  else:
    R=R+str(Word.count('y'))
print(R)

a. PPYTHO1n13V
b. PpYTHO113V
c. PXSGNM1M13V
D. PXSGNM1N13V

46. Consider the following directory structure

Suppose the current working directory is Sports . What will be the relative path of the file Syllabus.jpg?

a. Academics/Syllabus.jpg
b. ../Academics/Syllabus.jpg
c. ./Academics/Syllabus.jpg
d. Sports/Examination/Academics

47. Suppose content of 'Story.txt' is

> Python is a language
> Using python we code programs
> Programs are instructions given to computer
> Python is easy to learn

What will be the output of the following code?
myfile = open("Story.txt")
c=0
data = myfile.readlines()
for line in data:
   if line[0] in ['P','U'] and len(line)>25:
     c+=2
print(c)
myfile.close()

  a. 4   b. 3
  c. 2   d. 1

48. Find the output :-
t=('day',((('a',9),'b','z'),'c',2),[10,12,14])
print(t[1][1],len(t))

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

49. Find the output:
s="EXAM"
for i in range(-1,-len(s),-1):
   print(s[i],end="$")

  a. M\$A\$X\$ b. E\$X\$A\$
  c. E\$X\$A\$M\$ d. M\$A\$X\$E\$

<div align="center">

Section-C

Case Study based Question

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

Aman is attempting his practical exam. He is given an incomplete function search() to search and display the details of student having rno as 12.The file student.dat is already created with data in the following format [rno ,name,marks]. The binary file student.dat contains details of 10 students written as a separate list for each student.

```python
def search():

    f=open("student.dat",_____)    # Statement 1

    _____ :                        # Statement 2

        while True:

            rec=pickle._____       # Statement 3

            if _____:        # Statement 4

                print(rec)

    except:

        pass

    _____           # Statement 5
```

50. In which mode should Aman open the file in Statement 1
    - a. r
    - b. r+
    - c. rb
    - d. wb
51. Identify the suitable code to be used in blank space given as Statement 2
    - a. If rec[0]==12
    - b. for I in range(10)
    - c. pass
    - d. try
52. Identify the function to be used at the blank space in line marked as Statement 3
    - a. dump(f)
    - b. load(f)
    - c. dump(f,"student.dat")
    - d. load(f,"student.dat")
53. What will be the suitable code for the blank space in line marked as Statement 4
    - a. rec[0]==12
    - b. rec[1]==12
    - c. rec[2]==12
    - d. rec[3]==12
54. Which statement should Aman use in line marked as Statement 5 to close the file
    - a. file.close()
    - b. close()
    - c. close(f)
    - d. f.close()
55. Aman wants to add more record to the file "student.dat". which mode should he open the file
    - a. wb
    - b. ab
    - c. w
    - d. a

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