SAMPLE PAPER 9

COMPUTER SCIENCE

*A Highly Simulated Practice Questions Paper for CBSE **Class XII** (Term I) Examination*

Instructions

1. This question paper is divided into three sections.
*2. **Section - A** contains 25 questions (1-25). Attempt **any 20** questions.*
*3. **Section - B** contains 24 questions (26-49). Attempt **any 20** questions.*
*4. **Section - C** contains 6 case study based questions (50-55). Attempt **any 5** questions.*
5. Each question carries 0.77 mark.
*6. There is **no** negative marking.*

Roll No. | | | | | | | |

Maximum Marks : 35
Time allowed : 90 min

Section A

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

1. What is the maximum length of an identifier?
(a) 56 (b) 256 (c) 128 (d) Any length

2. Which of the following is not a bitwise operator?
(a) & (b) ^ (c) ! (d) /

3. What is the output of following code?
```
a=3+float(8)/int(3.0)
print(a)
```
(a) 2.66 (b) 5.66 (c) 3.66 (d) Error

4. What is the output of following code?
```
list1=list()
print(list1)
```
(a) () (b) (,) (c) [] (d) Error

5. To add a new element to the list, which of the following statement is used?
(a) `list1.add(x)` (b) `list1.addLast(x)` (c) `list1.append(x)` (d) `list1.addEnd(x)`

6. Which of the following code does not contain any error?
(a) `round()` (b) `round (53.7)`
(c) `round (53.7345, 3, 2)` (d) `round (3454.2, 1, 1)`

7. Correct syntax of readlines () is

(a) `file.readlines()` (b) `file.readlines[]`

(c) `file.readlines(n)` (d) `readlines(file)`

8. Which function is used to read single line from file?

(a) readline() (b) readlines()

(c) readstatement() (d) readfullline()

9. Which of the following is the mode for both writing and reading in binary format in file?

(a) wb+ (b) w (c) wb (d) w+

10. Which of the following is false about "import modulename" form of import?

(a) The namespace of imported module becomes part of importing module.

(b) This form of import prevents name clash.

(c) The namespace of imported module becomes available to importing module.

(d) The identifiers in module are accessed as : modulename.identifier.

11. What will be the output of the following Python function?

```
all(0, 6, 3.2)
```

(a) True (b) False (c) Error (d) 0

12. How many keyword arguments can be passed to a function in a single function call?

(a) Zero (b) One (c) Zero or more (d) One or more

13. If return statement is not used inside the function, the function will return

(a) None (b) 0

(c) Null (d) Arbitrary value

14. …… are the arguments passed to a function in correct positional order.

(a) Required arguments (b) Keyword arguments

(c) Default arguments (d) Variable-length arguments

15. What is the output?

```
Num=2+3–1*3
```

(a) 12 (b) 2 (c) 4 (d) 3

16. Choose the correct for loop statement to be repeated 50 times.

(a) `for in range(50):` (b) `for i in range(50):`

(c) `for i in range(0,50,1) :` (d) `for i in range (1,50,1) :`

17. In ……, we put values together into a new tuple.

(a) unpacking (b) packing (c) replication (d) slicing

18. If str1="Python Program", then what is the output of print(str1[2:12:3])?

(a) thon (b) toPr (c) tnrr (d) trrm

19. Which of the following is a value passed to the function during the function call?

(a) Argument (b) Parameter (c) Keyword (d) Statement

20. Which of the following is correct code to remove the file "story.txt"?

(a) `remove("story.txt")` (b) `remove(story.txt)`

(c) `os.remove("story.txt")` (d) `os.remove="story.txt"`

21. What is the output?

```
val='8'+2
print(val)
```

(a) 82 (b) 88 (c) 22 (d) Error

22. Which of the following is a logical error?

(a) Leaving out a keyword
(b) Division by zero
(c) Using the wrong variable name
(d) Incorrect indentation

23. What will be the output of following code?

```
a, b =12, 10
c=a//b+4*2
d=c–10
print(d)
```

(a) 1 (b) –1 (c) 0 (d) 2

24. Which type of statement specifies the order in which actions are executed?

(a) Null statement (b) Control statement
(c) Compound statement (d) Simple statement

25. What will be the output?

```
list1=[2, 5, 4, 7, 9, 8]
list2=list1+10
print(list2)
```

(a) [2, 5, 4, 7, 9, 8, 10] (b) [10, 2, 5, 4, 7, 9, 8]
(c) [2, 5, 4, 10, 7, 9, 8] (d) Error

Section B

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

26. What is the output of following code?

```
tup1=(3, 2, 5, 9)
tup2=(3, 8, 7)
t=tup1*tup2
print(t)
```

(a) (3, 2, 5, 9, 3, 8, 7) (b) (3, 8, 7, 3, 2, 5, 9) (c) (3, 2, 3, 8, 7, 5, 9) (d) Error

27. What will be the output of following code?

```
def Func(x):
    print(x+2)
x = 4
x = – 5
Func(37)
```

(a) 37 (b) 41 (c) 39 (d) 32

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

A = 5 * 5 + 4 / / 5 + 15 – 9 / / 2 + 10

(a) 36 (b) 46 (c) 47 (d) 56

29. What is the output of following code?

```
a = 5
def MyFunc() :
    global a
    a = a + 3
MyFunc()
print(a)
```

(a) 3 (b) 8
(c) 5 (d) Error

30. What is the output of the following code?

```
a = 70
while(a>50):
     print(a)
     a = a – 30
```

(a) 40 (b) 30 (c) 50 (d) 70

31. Suppose the content of file "story.txt" is

Honesty is the best policy.

What is the output of following code?

```
myfile=open ("story.txt", 'r')
s=myfile.read(12)
print(s)
myfile.close()
```

(a) Honesty is (b) Honesty is the
(c) Honesty is t (d) Error

32. What will be the output of the following Python code?

```
a=(i for i in range(5))
for i in a:
    print(i)
for i in a:
    print(i)
```

(a) 0 (b) 1 (c) 2 (d) 1
1 2 3 2
2 3 4 3
3 4 5 4
4 5
6

33. What will be the output of the following Python code?

```
def myFunc(a):
  a=['123', 'abc']
  return id(a)
val=['abc','123']
print(id(val)= = myFunc(val))
```

(a) True (b) False
(c) Flag (d) Error

34. What is the output of the following Python code?

```
val=10
def test(a=2, b=val):
    print(a,b)
val=23
test(5)
```

(a) 5 10 (b) 10 5 (c) 23 5 (d) 23 15

35. What will be the output of the following Python code?

```
def myFunc(a, b):
    if a > b :
       return a
    elif a = = b:
       return 'Equal numbers'
    else:
       return b
print(myFunc(2, 8))
```

(a) 8 (b) 2 (c) Equal numbers (d) Error

36. What is the output of the following Python code?

```
def test(i=3, j=5):
 i = i + j
 j = j + 1
    print(i, j)
test(j = 4, i = 5)
```

(a) 3 5 (b) 8 8 (c) 5 4 (d) 9 5

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

```
val=12345
for i in val :
    print(i)
```

(a) 1 2 3 4 5 (b) 12345
(c) 1 3 5 (d) Error

38. What is the output of following code?

```
a={11 : "Hindi", 12 : "English", 13 : "Science"}
for i, j in a:
    print(i, j)
```

(a) 11 12 13 (b) Hindi English Science
(c) 11 Hindi 12 English 13 Science (d) Error

39. Consider a tuple tup1=(3, 7, 9, 6, 2) on a binary file ''story.bin'':

```
import pickle
tup1=(3, 7, 9, 6, 2)
myfile=open ("story.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)`

40. Suppose the content of file "IMP.TXT" is

> Pinaky has gone to his friend's house.
> His friend's name is Ravya. Her house is 12 km from Pinaky's house.

What is the output of following code?

```
def test():
  f=open("IMP.TXT")
  e=0
  u=0
  while True:
     l=f.readline()
     if not l:
        break
     for i in l:
        if(i=='E' or i=='e'):
           e=e+1
        elif(i=='U' or i=='u'):
           u=u+1
print(e)
print(u)
f.close()
```

(a) 5
3

(b) 7
3

(c) 3
3

(d) 5
5

41. What is the output of following code?

```
import random
X = [100, 75, 10, 125]
Go = random.randint (0, 3)
for i in range (Go):
        print (X[i], "$$")
```

(a) 100$$75$$10$$

(b) 75$$10$$125$$

(c) 75$$10$$

(d) 10$$125$$100

42. What is the output of following code?

```
def Findoutput ():
   L = "earn"
   X = " "
   L1 = []
   count = 1
   for i in L :
      if i in ['a', 'e', 'i', 'o', 'u']:
         X = X + i.swapcase ()
      else:
         if (count% 2 ! = 0) :
            X = X + str (len (L [: count]))
         else:
```

```
            X = X + i
          count = count + 1
      print (X)
Findoutput ()
```

(a) eA3N (b) EA3n (c) EA3N (d) Ea3n

43. What is the output of following code?

```
l1=[1, 2, 8, 9, 5]
for i in range (1, 5):
  l1[i–1] = l1[i]
for i in range(0, 5):
  print(l1[i], end="")
```

(a) 5 5 1 2 8 (b) 5 1 2 8 9
(c) 2 8 9 5 1 (d) 2 8 9 5 5

44. What is the output of following code?

```
def Func():
  i=11
  while i>1:
     if(i%2==0) :
        a=i%2
        i=i-1
     else:
        i=i–3
        a=i
     print(a**3)
```

(a) 512
64
64
8
0

(b) 512
64
8
0

(c) 512
64
64
8

(d) Error

45. Suppose the content of file ''story.txt'' is

The test of my life

What is the output of following code?

```
f=open("story.txt")
i=f.read()
print(len(i))
f.close()
```

(a) 20 (b) 19 (c) 15 (d) 21

46. Suppose the content of file ''exam.txt'' is

Positive attitude is the key to solve many of the problem which you face in your life.

What is the output of following code?

```
myfile=open("exam.txt", "r")
i=myfile.read()
j=i.count('the')
```

```
print(j)
myfile.close()
```
(a) 3 (b) 2 (c) None (d) Error

47. What is the output of following code?
```
list1=['PQR', 'XYZ']
for i in list1:
    i.lower()
print(list1)
```
(a) ['pqr', 'xyz'] (b) ['PQR', 'XYZ'] (c) [None, None] (d) Error

48. Identify the output of following code.
```
list1=[23, 45, 47, 72, 69]
L=list1.pop(72)
print(L)
```
(a) 72 (b) [23, 45, 47, 69] (c) None (d) Error

49. What is the output of following code?
```
i = 2
j = 5
value = 5 + 4 * 2 + i * *j
print(value)
```
(a) 45 (b) 23 (c) 50 (d) Error

Section C

(Case Study Based Questions)

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

Below is a program to delete the line having word (passed as argument). Answer the questions that follow to execute the program successfully.

```
import _____                                  # Statement 1
def filedel(word) :
   file1 = open("Python.txt "," _____") # Statement 2
   nfile = open("algo.txt", "w")
   while True :
      line = file1._____                      # Statement 3
      if not line :
         break
      else :
         if word in line :
            _____                             # Statement 4
         else :
            print(line)
            nfile. _____ (line)               # Statement 5
      file1.close()
      _____ . close()                         # Statement 6
filedel('write')
```

50. Choose the correct option to fill up the blank in line marked as Statement 1.
(a) csv (b) bin (c) os (d) python

51. In which mode, program should open the file to delete the line in statement 2?
(a) w (b) r
(c) r+ (d) a+

52. Choose the correct option to fill up the blank in line marked as Statement 3.
(a) read() (b) read(n)
(c) readlines() (d) readline()

53. Identify the missing code for blank space in line marked as Statement 4.
(a) True (b) Flag
(c) Pass (d) False

54. Choose the correct option to fill up the blank in line marked as Statement 5.
(a) read (b) write
(c) writelines (d) writeline

55. Choose the correct option to fill up the blank in line marked as Statement 6.
(a) file 1 (b) file
(c) nfile (d) None

Answers

1. (d)	**2.** (c)	**3.** (b)	**4.** (c)	**5.** (c)	**6.** (b)	**7.** (a)	**8.** (a)	**9.** (a)	**10.** (a)
11. (c)	**12.** (c)	**13.** (a)	**14.** (a)	**15.** (b)	**16.** (c)	**17.** (b)	**18.** (c)	**19.** (a)	**20.** (c)
21. (d)	**22.** (c)	**23.** (b)	**24.** (b)	**25.** (d)	**26.** (d)	**27.** (c)	**28.** (b)	**29.** (c)	**30.** (d)
31. (c)	**32.** (a)	**33.** (b)	**34.** (a)	**35.** (a)	**36.** (d)	**37.** (d)	**38.** (d)	**39.** (b)	**40.** (b)
41. (a)	**42.** (b)	**43.** (d)	**44.** (a)	**45.** (b)	**46.** (b)	**47.** (b)	**48.** (d)	**49.** (a)	**50.** (c)
51. (b)	**52.** (d)	**53.** (c)	**54.** (b)	**55.** (c)					

SOLUTIONS

1. Identifiers are used to identify a variable, function or other entities in a program.
It can be of any length.

2. Bitwise operators work on bits and perform bit-by-bit operation. These operators are &, ^ and /.

3. **Output** a=3+2.66 =5.66

4. There is no element in () that means it is an empty list. Empty list is represented by [].

5. append(x) is used to add an element to the list at end.

6. round (53.7) does not contain any error, as it will round the number which has passed as parameter.

7. readlines () method will return a list of strings,each separated by '\n'.

Syntax `fileHandle.readlines()`

8. The readline () function reads a single line from the file fh = open("filename", "r")
content=fh.readline().

9. wb+ opens a file for both writing and reading in binary format. Overwrites the existing file if the file exists. If the file does not exist, creates a new file for reading and writing.

10. In the "import modulename" form of import, the namespace of imported module becomes available to, but not part of the importing module.

11. The function all() returns 'True' if any one or more of the elements of the iterable are non-zero. In the given case, the values are not iterable, hence an error is thrown.

12. Zero or more keyword arguments can be passed to a function in a single function call.
Zero keyword arguments may be passed if all the arguments have default values.

13. If return statement is not used inside the function, the function will return None.

14. Required arguments are the arguments passed to a function in correct positional order. Here, the number of arguments in the function call should match exactly with the function definition.

15. Num = 2 + 3 – 1*3

= 2 + 3 – 3 = 5 – 3 = 2

16. range () is used to generate a sequence of numbers overtime. for statement encloses one or more statements that form a body of the loop, the statement in the loop repeat continuously a certain number of times.

Syntax

```
for variable in range (start,stop,step) :
```

17. In packing, we put values together into a new tuple while in unpacking we extract those values into a single variable.

18. Strings are also provide slice steps which used to extract characters from string that are not consecutive.

19. An argument is a value passed to the function during the function call which is received for corresponding parameter defined in function header.

20. remove() is used to remove the existing file. This method does not return any value.

Syntax `os.remove (filename)`

21. It will give TypeError because integer and string cannot be concatenate.

22. Logical errors occur when the program does not give any error but still gives an incorrect output. These errors occur due to mistakes of the programmer.
Using the wrong variable name is an example of logical error.

23. c = 12 / /10 + 4 * 2

= 1 + 4 * 2

= 1 + 8

c = 9

d = 9 – 10 = – 1

prints– 1

24. Control statement specifies the order in which actions are executed.

25. It will give an error because operator cannot add list with other type object as number or string.

26. This code gives TypeError because cannot multiply sequence by non-int of type "tuple".

27. The value passed to the function Func() is 37. This value is incremented by 2 and then printed.

28. A = 5 * 5 + 4 / /5 + 15 – 9 / /2 +10

= 25 + 4 / /5 + 15 – 9 / /2 + 10

= 25 + 0 + 15 – 9 / /2 + 10

= 25 + 0 + 15 – 4 + 10

= 25 + 15 – 4 + 10

= 40 – 4 + 10

= 36 + 10 = 46

29. Since 'a' has been declared a global variable, it can be modified very easily within the function.

30. **Iteration 1** `while(70 > 50) : True`
`prints 70`
`a = 70 – 30 = 40`

Iteration 2 `while (40 > 50): False`

So, output is 70.

31. read() returns a string containing all characters in a file.

Syntax `fileHandle.read()`

32. We can loop over a generator object only once.

33. A new object is created in the function.

34. At the time of leader processing, the value of 'val' is 10. It is not modified later. The value passed to the function test is 5. Hence, the output of the code is 5 10.

35. The function returns the maximum of the parameters, in this case the numbers supplied to the function. It uses a simple if..else statement to find the greater value and then returns that value.

36. The values given during function call is taken into consideration, i.e. i = 5 and j = 4.

i = 5 + 4 = 9

j = 4 + 1 = 5

So, output is 9 5.

37. Objects of type int are not iterable.

38. It will give error because objects of type int are not iterable.

39. dump() is used to write object to a file before use the dump() method, you have to import pickle module.

Syntax `pickle. dump(object_to_pickle, fileobject)`

40. This program opens a file ''IMP.TXT'' and read the content word-for-word. It counts and display the occurrence of alphabet E and U (including small cases).

41. It will read the element of list and print them with random module.

42. It takes string as "earn" and iterate the characters of given string. It apply some condition and print them.

43. The elements having indexes number from 1 to 4 are shifted forward by one index due to the first for loop and the item of index four is printed again because of the second for loop.

44. **Iteration 1** `while (11 > 1) : true`
`if (11%2 = = 0) false`
`else`
`i = 11 – 3 = 8`
`a = 8`
`prints 512`

Iteration 2 `while (8 > 1) : true`
`if (8 % 2 = = 0) true`
`a = 8% 2 = 4`
`i = 8 – 1 = 7`
`prints 64`

Iteration 3 `while (7 > 1) : true`
`if (7%2 = = 0) false`
`else`
`i = 7 – 3 = 4`
`a = 4`
`prints 64`

Iteration 4 `while (4 > 1 ) : true`
`if (4% 2 = = 0) true`
`a = 4%2 = 2`
`i = 4 – 1 = 3`
`prints 8`

Iteration 5
```
while (3 > 1): true
    if (3%2 = = 0) false
    else
        i = 3 – 3 = 0
        a = 0
    prints 0
```

So, output is

512
64
64
8
0

45. File 'story.txt' will be open in read mode by default and variable i store the content of file character-by-character. len() method is used to find the length or number of bytes.

46. This code opens a file "exam. txt" and read the data and count the 'the' word with count() and assigned its value to j.

47. The function lower() does not modify a string in place, it returns a new string which is not being stored anywhere.

48. In pop(), parenthesis put index number instead of element. But in given list, maximum index number is 4 then, 72 is out of index range.

49. value = 5 + 4 * 2 + 2 ** 5
= 5 + 4 * 2 + 32
= 5 + 8 + 32
= 13 + 32
= 45

50. os module provides a unified interface to a number of operating system methods.

51. r mode opens a file for reading only. The file pointer is placed at the beginning of the file.

52. readline() will read from file line-by-line. For readline(), a line is terminated by '\n' or end of line.

53. When if condition becomes true it will pass the value.

54. write() takes a string and writes it into the file. This method does not add a new line character '\n' to the end of the string.

55. nfile is a file object and nfile.close() is used to close the file 'algo.txt'.
It is important to close the file as soon as you have finished your work with it. Opened file is closed by calling the close() method of its file objects.