SRI RAMAJAYAM GLOBAL SENIOR SECONDARY CBSE SCHOOL

HALF YEARLY EXAMINATION DECEMBER-2020

STD: XI   **TIME: 3.00 Hours**

SUBJECT: COMPUTER SCIENCE (083)   **TOTAL MARKS: 70**

DATE: 29.12.2020   Student Name: _____

I.   VERY SHORT ANSWER (One Marks)   **20x1=20**

1. Which one is a character set?

    a) Letters (A –Z)

    b) Symbols (+ _ # & …)

    c) Digits (0 – 9)

    d) All the above

2. What do you understand by **string slices**?

3. What would follow expression return?

    "hello world".isalnum()

4. Identify and write the name of the module to which the following

    functions belongs:

    i) floor()   ii) randint()

5. What is the role of these functions?

    i) lstrip()   ii) capitalize()

6. What do you understand by term **'immutable'**?

7. How is **capitalize()** function different from **upper()** function?

8. What is the difference between an **error and exception**?

9. Why are lists called "mutable types"?

10. Find the output of the following:

    A=[12,34,56,98,'hello']

    print(1:4)

    i) 34, 56, 98   ii) 12, 34, 56   iii) 34,56,98,'hello'   iv) Error

11. How is **clear()** function different from **del\<dict\>** statement?

(or)

Add an element in the end of the list_____ (*append( ) / extend( )*)

12. Identity the following strings which one not a correct one?

    a) "srgs"

    b) 'SRGS7'

    c) "'Srgs'"

    d) "SRGS'

13. Rewrite the following code in python after removing all the syntax errors. Underline each correction done in the code.

    a,b = 2

    While a%b = 0

    a+=10

    b+=2

    Else:

    print('End')

14. Which of the following are not valid identifier names?

    i) pass   ii) if   iii) break   iv) none

15. Which of the following is/are not a valid operator in python?

    i) - =   ii) or   iii) > =   iv) = !

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

    A = '7'

    print(A*4+str(int(A)*2))

(or)

if-statement also known as _____

17. Predict output of the following code:

A=[12,45,78,45,234]

B=len(A)

for i in range(0,B,2):

print(i)

(or)

Python provides debugger named as _____

18. Which of the following are not valid operations in python?

      i.   Slicing a list

     ii. Concatenation of a list and a tuple

    iii. Slicing a dictionary

    iv. Adding an element to an existing tuple.

19. Consider python statement : **X=eval(input("Enter data"))**

What will be the data type of **X** if the user input is:

i) [1,3,53]   ii) 45

(or)

If **s=[34,56,44,(45,67),8,5]** then what will be the output of :

i)   len(s)   ii) s[::-2]

20. Identify the valid declaration of **d:**

d=("hello",34,56.7)

i) List   ii) tuple   iii) dictionary   iv) set

(or)

List are _____. Tuples are _____ sequence.

 (*Mutable / Immutable*)

II. SHORT ANSWER (Two Marks)   **10x2=20**

21. What is the difference between interactive mode and script mode in python?

22. Predict the output of the following:

x, y = 7, 12

x, y, x = x+4, y+2, x+12

print (x, y)

23. What is the difference between implicit type conversion and explicit type conversion?

(or)

What do you understand the following:

(i) pow()   (ii) fabs()

24. Why is while loop called an entry controlled loop?

(or)

What is the role of these functions?

(i) isalnum()   (ii) isalpha()

25. What is the role of these methods?

(i) index()   (ii)extend()

26. Write a program to find the largest (maxmium) number of a list of numbers.

(or)

How can you say that a tuple is an ordered list of objects?

27. What are immutable and mutable types? List immutable and mutable types of python.

28. What do you understand the following functions?

(i) keys()   (ii) items()

(or)

What do you understand the following methods?

i)   count()   ii) len()

29. Rewrite the following python program after removing all the syntactical errors (if any), underline each correction:

Def checkval():

      x=input("Enter the number")

      if x%2=0:

          print x, "is even"

      else if x<0:

          print x, "Should be positive"

      else

          print x, "is odd"

30. What is the significance of break and continue statements?

(or)

Define: Packing and Unpacking.

III. LONG ANSWER (Three Marks)   5x3=15

31. Which of the following are valid identifiers and why/ why not:

    Data_rec   -
    _data   -
    1 data   -
    data1   -
    my.file   -
    elif   -

32. What will be the sizes of following constants:

    '\a'
    "\a"
    "Rema\'s"
    "it's"
    "XY\YZ"
    'srgs_school'

33. Write a program that generates the following output:

    2
    4
    6
    8
    10

34. Identify the data types of the values given below:
    3
    3j
    13.0
    '13'
    "13"
    2+0j

35. Mention the type of following tuples.

    a) ( )
    b) (1, 2, 3)
    c) (1, 2.5, 3.7, 9)
    d) ('a', 'b', 'c')
    e) ('a', 1, 'b', 3.5, 'zero')
    f) ('One', 'Two', 'Three')

IV. VERY LONG ANSWER (5 Marks)   3x5=15

36. What is Operator in Python? List out the types of operators in python. Explain any 5 types of operators.

(or)

Explain:

   a. Identifier
   b. Constant
   c. Variable
   d. Token
   e. Expression

37. Write a program for Even / Odd using if-else control?

(or)

Write a Program to print table of a number, say 5. (5th Table)

38. What do you understand the following methods?

   a.   count()
   b.   min()
   c.   len()
   d.   pop()
   e.   remove()

(or)

When will occur the following errors? Explain.

   a.   ValueError
   b.   EOFError
   c.   NameError
   d.   IOError
   e.   TypeError

All The Best..!