Programming for Problem Solving(19BT10501)

1. Diagramatic representation of algorithm is called _____
    Ans:Flow Chart
2. The Process of dividing a big problem into smaller and managle parts is called_____

3. _____ block is used to read input values
4. _____ function is used to read input values from keyboard
    Ans:input()
5. _____ function is used to display the output
    Ans: print()
6. _____ refers to the step by step process of solving a specific task.
7. What is the output of the following code
    print(10//4)
    Ans:2
8.

    What is the output of the following program :
    i = 0
    while i < 3:
        print i
        i++
        print i+1

    Ans:0,2,1,3,2,4

9. Identify the output of the following program:
    x=123
    for i in x:
        print(i)
    Ans:1,2,3
10. Identify the invalid identifier.
11. By default, the input read using input() function is of _____ data type.
    Ans: **String**
12. _____ function is used to convert string data type into float data type
    Ans: float()
13. Which of the following is an invalid statement?
14. Operators with the same precedence are evaluated in which manner?
    Ans: Left to Right
15. What is the output of this expression, 3*1**3?
    Ans: 3
16. Identify the return type of input().split() statement
    Ans: list of strings
17. What is the return type of id() function.
    Ans: int

18. What is the output of the statement.
Print("a"*4)   **ans: aaaa**

19. Which of the following is not a complex number?
20. Which of the following operators has its associativity from right to left?
21. What will be the value of X in the following Python expression?
X = 2+9*((3*12)-8)/10
Ans: 27.2
22. What will be the value of the following Python expression?
float(4+int(2.39)%2)
Ans: 4.0
23. What will be the output of the following Python expression?
Print(bin(29))
Ans: 0b11101
24. What will be the output of the following Python expression if x=15 and y=12?
Print(x&y)

Ans:12
25. Bitwise _____ gives 1 if either of the bits is 1 and 0 when both of the bits are 1.

Ans: XOR
26. Which of the following expressions can be used to multiply a given number 'a' by 4?
27. What is the two's complement of -44?
Ans: Binary: 11010100
28. What will be the output of the following Python code?
```
i=1
while False:
      if i%2==0:
            break
      print(i)
      i+=2
```
Ans: No output
29. Identify the output of the program given below.
```
a=0
while a<10:
      print("welcome")
      pass
```
Ans: It will print welcome infinitely
30. In Python, a variable must be declared before it is assigned a value.
Ans: False
31. What is the output of the following program?
```
for k in range(1,2):
      print(k,end="")
for k in range(4,6):
      print(k,end="")
```
Ans: 145

32. What is the output if the following code snippet?
```
a=4.5
b=15
print(a+b)
```
Ans: 19.5
33. What is the output of the following program?
```
i=2
while True:
     if i%3==0:
            break
     print(i,end="")
     i+=2
```
Ans: 24
34. Which of the following is a valid for loop in Python?
35. What is the output of range(10,0,-2).
Ans: 10,8,6,4,2
36. When does the else statement written after loop executes?
37. What is the output of the following program.
```
x = "svec"
for i in range(1,len(x)):
          print(i)
```

Ans:1,2,3

38. Identify the preconditional loop in python?
39. What is the result of the execution of the following code?
```
for x in range (2):
    for y in range (2):
        print(x, y, sep="")
```
Ans: 00,01,10,11
40. What is the output of the program.
```
x="abcdef"
i="a"
while i in x:
     x = x[:-1]
print(i, end = " ")
```

Ans: a

41.   What is the output of the following?
```
x = 'abcd'
for i in range(len(x)):
        x[i].upper()
print(x)
```
Ans:abcd

42.   What is the output of the following?
```
s = "welcome svec"
for i in string.split():
        print (i, end=", ")
```
Ans: welcome, svec,

43.   Which two statements are used to implement iteration.
Ans: For ,while

44.   Consider the loop control structure in programming. Which term describes a loop that continues repeating without a terminating (ending) condition?

45.   What will be the output of the following Python code snippet?
```
print('The sum of {0} and {1} is {2}'.format(2, 10, 12))
```
Ans: sum of 2 and 10 is 12

46.   Which of the following is False regarding loops in Python?

47.   Which of the following is True regarding loops in Python?

48.   How many times will the loop run?
```
i=2
while(i>0):
      i=i-1
```
Ans: 2 times

49.   Can we write if/else into one line in python?
Ans: Yes

50.   What will be output of this expression:
```
'p' + 'q' if '12'.isdigit() else 'r' + 's'
```
Ans: pq

51.   What does the following print?
```
x = 10 / 4
y = 5 / 2.0
print(x+y)
```
Ans:5.0

52.   In how many lines the following statement output will be displayed?
```
Print( "how\nnow\tbrown/ncow?")
```
Ans: 2 lines

53.   Identify the output of the program.
```
ch='A'
print(chr(1+ord(ch)))
```
Ans:B

54. Predict the output of the following program.
```
x=3
if(x==0):
    print("SVEC")
elif(x==3):
    print("COLLEGE")
print("TIRUPATI")
```
Ans: COLLEGE
     TIRUPATI

55. What does the following code print to the console?
```
If 0:
  print("SVEC")
else:
  print("COLLEGE")
```
Ans: COLLEGE

56. What is the output of the following code
```
print(bool(0), bool(3.14159), bool(-3), bool(1.0+1j))
```
Ans: False True True True

57. What is the output of the following code
```
x,y=100,50
print(x and y)
```
Ans: 50

58. What is the output of the following print() function
```
print(sep='--', 'SVEC', 28, 'TIRUPATI')
```

59. What is the output of the following print() function
```
print('%d %d %.2f' % (11,'22',11.22)
```
Ans: %d format: a number is required, not str (An Error)

60. What is the output of print(abs(-45.300))
Ans: 45.3