1. Find the invalid variable among the following:
a. 1st_string
b. my_string_1
c. _
d. foo
Answer: (a) 1st_string

2. The order of precedence in the Python language is:
A) Exponential
B) Parentheses
C) Division
D) Multiplication
E) Subtraction
F) Addition
a. B,A,D,C,F,E
b. A,B,D,C,F,E
c. A,B,C,D,E,F
d. B,A,D,C,E,F
Answer: (a) B,A,D,C,F,E

3. Which one of these is incorrect?
a. float('nan')
b. float('inf')
c. float('12+34')
d. float('56'+'78')
Answer: (c) float('12+34')

4. The value of the Python expression given below would be:
4+2**5//10
a. 77
b. 0
c. 3
d. 7
Answer: (d) 7

5. The return value for trunc() would be:
a. bool
b. float
c. int
d. None
Answer: (c) int

6. What is the output of the Python code given below, if the date of the system is June 21st, 2017 (Wednesday)?
[] or {}
{} or []
a.[] []
b.[]{}
c.{}{}
d.{}[]
Answer: (d){}[]

7. The output of this Python code would be:
s='{0}, {1}, and {2}'
s.format('hi', 'great', 'day')
a. 'hi, great, and day'
b. 'hi great and day'
c. 'hi, great, day'
d. Error
Answer: (a) 'hi, great, and day'

8. The output of this Python code would be:
a = ['mn', 'op']
for i in a:
i.upper()
print(a)
a. [None, None]
b. ['MN', 'OP']
c. ['mn', 'op']
d. None of the above
Answer: (c) ['mn', 'op']

9. The output of this Python code would be:
print("mno. PQR".capitalize())
a. Mno. Pqr
b. Mno. pqr
c. MNO. PQR
d. mno. pqr
Answer: (b) Mno. pqr

10. Which arithmetic operators can we NOT use with strings?
a. –
b. +
c. *
d. All of the above
Answer: (a) –

11. Which function do we use to shuffle a list(say list1)?
a. shuffle(list1)
b. list1.shuffle()
c. random.shuffleList(list1)
d. random.shuffle(list1)
Answer: (d) random.shuffle(list1)

12. In the following statements of Python, which ones will result into the output: 6?
A = [[1, 2, 3],
[4, 5, 6],
[7, 8, 9]]
a. A[3][2]
b. A[2][3]
c. A[1][2]
d. A[2][1]
Answer: (c) A[1][2]

13. Is this code valid in Python?
>>> m=6,7,8,9
>>> m
a. No, many values will unpack
b. Yes, (6,7,8,9) will be printed
c. Yes, 6 will be printed
d. Yes, [6,7,8,9] will be printed
Answer: (b) Yes, (6,7,8,9) will be printed

14. Which function removes a set's first and the last element from a list?
a. pop
b. remove
c. dispose
d. discard
Answer: (a) pop

15. The output of this Python code would be:
>>> x={1:”X”,2:”Y”,3:”Z”}
>>> del x
a. the del method does not exist for dictionary
b. the del would delete the values present in dictionary
c. the del would delete the entire dictionary
d. the del would delete all the keys in dictionary
Answer: (d) the del would delete all the keys in dictionary

16. The output of this Python code would be:
sum(1,2,3)
sum([2,4,6])
a. 6, 12
b. Error, Error
c. Error, 12
d. 6, Error
Answer: (c) Error, 12

17. The output of this Python code would be:
def find(x, **y):
print(type(y))
find(‘letters’,X=’1',Y=’2')
a. Dictionary
b. An exception is thrown
c. String
d. Tuple
Answer: (a) Dictionary

18. Which one of these is NOT true about recursion?
a. We can replace a recursive function by a non-recursive function
b. The memory space taken by the recursive functions is more than that of non-recursive function
c. Running a recursive function is faster as compared to a non-recursive function
d. The process of recursion makes it easier for users to understand a program
Answer: (c) Running a recursive function is faster as compared to a non-recursive function

19. The output of this Python code would be:
a = [‘mn’, ‘op’]
print(len(list(map(list, a))))
a. 4
b. 2
c. Not specified
d. Error
Answer: (d) Error

20. Which of these functions can NOT be defined under the sys module?
a. sys.argv
b. sys.readline
c. sys.path
d. sys.platform
Answer: (b) sys.readline

21. Which function doesn’t accept any argument?
a. re.compile
b. re.findall
c. re.match
d. re.purge
Answer: (d) re.purge

22. In Python, the primary use of the tell() method is that:
a. within the file, it tells the end position
b. within the file, it tells the current position
c. it tells us if the file is opened
d. none of the above
Answer: (b) within the file, it tells the current position

23. The hasattr(obj,name) is used to:
a. check if any specific attribute exists
b. set an attribute
c. access the object’s attribute
d. delete an attribute
Answer: (a) check if any specific attribute exists

24. Find out the private data field among the following:
def __init__(self):
__m = 1
self.__n = 1
self.__o__ = 1
__p__= 1
a. __m
b. __n
c. __o__
d. __p__
Answer: (b) __n

25. In Python, find which one isn't an exception handling keyword.
a. accept
b. finally
c. try
d. except
Answer: (a) accept

1. Python is a ___object-oriented programming language.

A. Special purpose
B. General purpose
C. Medium level programming language
D. All of the mentioned above

Answer: B) General purpose

2. Amongst the following, who is the developer of Python programming?

A. Guido van Rossum
B. Denis Ritchie
C. Y.C. Khenderakar
D. None of the mentioned above

Answer: A) Guido van Rossum

3. Amongst which of the following is / are the application areas of Python programming?

A. Web Development
B. Game Development
C. Artificial Intelligence and Machine Learning
D. All of the mentioned above

Answer: D) All of the mentioned above

4. Amongst which of the following is / are the Numeric Types of Data Types?

A. int
B. float
C. complex
D. All of the mentioned above

Answer: D) All of the mentioned above

5. list, tuple, and range are the ___ of Data Types.

A. Sequence Types
B. Binary Types
C. Boolean Types
D. None of the mentioned above

Answer: A) Sequence Types

6. Float type of data type is represented by the float class.

A. True
B. False

Answer: A) True

7. bytes, bytearray, memoryview are type of the ___ data type.

A. Mapping Type
B. Boolean Type
C. Binary Types
D. None of the mentioned above

Answer: C) Binary Types

8. The type() function can be used to get the data type of any object.

A. True
B. False

Answer: A) True

9. Binary data type is a fixed-width string of length bytes?

A. True
B. False

Answer: A) True

10. Varbinary data type returns variable-width string up to a length of max-length bytes?

A. TRUE
B. FALSE

Answer: A) TRUE

11. Amongst which of the following is / are the logical operators in Python?

1. and
2. or
3. not
4. All of the mentioned above

Answer: D) All of the mentioned above

12. Is Python supports exception handling?

A. Yes
B. No

Answer: A) Yes

13. What is the name of the operator ** in Python?

A. Exponentiation
B. Modulus
C. Floor division
D. None of the mentioned above

Answer: A) Exponentiation

14. The % operator returns the ___.

A. Quotient
B. Divisor
C. Remainder
D. None of the mentioned above

Answer: C) Remainder

15. Amongst which of the following is / are the method of list?

A. append()
B. extend()
C. insert()
D. All of the mentioned above

Answer: D) All of the mentioned above

16. The list.pop ([i]) removes the item at the given position in the list?

A. True
B. False

Answer: A) True

17. The list.index(x[, start[, end]]) is used to ___.

A. Return zero-based index in the list
B. Raises a ValueError if there is no such item
C. Both A and B
D. None of the mentioned above

Answer: C) Both A and B

18. Python Dictionary is used to store the data in a ___ format.

A. Key value pair
B. Group value pair
C. Select value pair
D. None of the mentioned above

Answer: A) Key value pair

19. The following is used to define a ___.

```
d = {
       <key>: <value>,
       <key>: <value>,
       .
       .
       .
       <key>: <value>
}
```

A. Group
B. List
C. Dictionary
D. All of the mentioned above

Answer: C) Dictionary

20. Python Literals is used to define the data that is given in a variable or constant?

A. True
B. False

Answer: A) True

21. Conditional statements are also known as ___ statements.

A. Decision-making
B. Array
C. List
D. None of the mentioned above

Answer: A) Decision-making

22. The if statement is the most fundamental decision-making statement?

A. True
B. False

Answer: A) True

23. Amongst which of the following if syntax is true?

A.
```
if condition:
    #Will executes this block if the condition is true
```
B.

C.
```
if condition
{
    #Will executes this block if the condition is true
}
```
D.

E.
```
if(condition)
    #Will executes this block if the condition is true
```
F.

G. None of the mentioned above

Answer: A)

24. Amongst which of the following is / are the conditional statement in Python code?

A. if a<=100:
B. if (a >= 10)
C. if (a => 200)
D. None of the mentioned above

Answer: A) if a<=100:

T

25. Which of the following is not used as conditional statement in Python?

A. switch
B. if...else
C. elif
D. None of the mentioned above

Answer: A) switch

26. Which of the following is false regarding conditional statement in Python?

A. If-elif is the shortcut for the if-else chain
B. We use the dictionary to replace the Switch case statement
C. We cannot use python classes to implement the switch case statement
D. None of the mentioned above

Answer: C) We cannot use python classes to implement the switch case statement

27. In Python, an else statement comes right after the block after 'if'?

A. True
B. False

Answer: A) True

28. In a Python program, Nested if Statements denotes?

A. if statement inside another if statement
B. if statement outside the another if statement
C. Both A and B
D. None of the mentioned above

Answer: A) if statement inside another if statement

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

```
a=7
if a>4: print("Greater")
```

A. Greater
B. 7
C. 4
D. None of the mentioned above

Answer: A) Greater

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

```
x,y = 12,14
if(x+y==26):
    print("true")
else:
    print("false")
```

A. true
B. false

Answer: A) true

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

```
x=13

if x>12 or x<15 and x==16:
    print("Given condition matched")
else:
    print("Given condition did not match")
```

A. Given condition matched
B. Given condition did not match
C. Both A and B
D. None of the mentioned above

Answer: A) Given condition matched

32. Consider the following code segment and identify what will be the output of given Python code?

```
a = int(input("Enter an integer: "))
b = int(input("Enter an integer: "))

if a <= 0:
    b = b +1
else:
    a = a + 1
```

A. if inputted number is a negative integer then b = b +1
B. if inputted number is a positive integer then a = a +1
C. Both A and B
D. None of the mentioned above**Answer:** C) Both A and B

33. In Python, ___ defines a block of statements.

A. Block
B. Loop
C. Indentation
D. None of the mentioned above

Answer: C) Indentation

34. An ___ statement has less number of conditional checks than two successive ifs.

A. if else if
B. if elif
C. if-else
D. None of the mentioned above

Answer: C) if-else

35. In Python, the break and continue statements, together are called ___ statement.

A. Jump
B. goto
C. compound
D. None of the mentioned above

Answer: B) goto

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

```
num = 10
if num > 0:
    print("Positive number")
elif num == 0:
    print("Zero")
else:
    print("Negative number")
```

A. Positive number
B. Negative number
C. Real number
D. None of the mentioned above

Answer: A) Positive number

37. The elif statement allows us to check multiple expressions.

A. True
B. False

Answer: A) True

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

```
i=5
if  i>11 : print ("i is greater than 11")
```

A. No output
B. Abnormal termination of program
C. Both A and B
D. None of the mentioned above

Answer: C) Both A and B

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

```
a = 13
b = 15
print("A is greater") if a > b else print("=") if a == b else
print("B is greater")
```

A. A is greater
B. B is greater
C. Both A and B
D. None of the mentioned above

Answer: B) B is greater

40. If a condition is true the not operator is used to reverse the logical state?

A. True
B. False

Answer: A) True

41. Loops are known as ___ in programming.

A. Control flow statements
B. Conditional statements
C. Data structure statements
D. None of the mentioned above

Answer: A) Control flow statements

42. The for loop in Python is used to ___ over a sequence or other iterable objects.

A. Jump
B. Iterate
C. Switch
D. All of the mentioned above

Answer: B) Iterate

43. With the break statement we can stop the loop before it has looped through all the items?

A. True
B. False

Answer: A) True

44. The continue keyword is used to ___ the current iteration in a loop.

A. Initiate
B. Start
C. End
D. None of the mentioned above

Answer: C) End

45. Amongst which of the following is / are true about the while loop?

A. It continually executes the statements as long as the given condition is true
B. It first checks the condition and then jumps into the instructions
C. The loop stops running when the condition becomes fail, and control will move to the next line of code.
D. All of the mentioned above

Answer: D) All of the mentioned above

46. The ___ is a built-in function that returns a range object that consists series of integer numbers, which we can iterate using a for loop.

A. range()
B. set()
C. dictionary{}
D. None of the mentioned above

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

```
for i in range(6):
    print(i)
```

A. 0
   1
   2
   3
   4
   5
B. 0
   1
   2
   3
C. 1
   2
   3
   4
   5
D. None of the mentioned above

Answer: A)
0
1
2
3
4
5

48. The looping reduces the complexity of the problems to the ease of the problems?

A. True
B. False

Answer: A) True

49. The while loop is intended to be used in situations where we do not know how many iterations will be required in advance?

A. True
B. False

Answer: A) True

50. Amongst which of the following is / are true with reference to loops in Python?

A. It allows for code reusability to be achieved.
B. By utilizing loops, we avoid having to write the same code over and over again.
C. We can traverse through the elements of data structures by utilizing looping.
D. All of the mentioned above

Answer: D) All of the mentioned above

51. A function is a group of related statements which designed specifically to perform a ___.

A. Write code
B. Specific task
C. Create executable file
D. None of the mentioned above

Answer: B) Specific task

52. Amongst which of the following is a proper syntax to create a function in Python?

```
A. def function_name(parameters):
B.     ...
C.     Statements
D.     ...
```

E.

```
F. def function function_name:
G.     ...
H.     Statements
I.     ...
```

J.

```
K. def function function_name(parameters):
L.     ...
M.     Statements
N.     ...
```

O.

P. None of the mentioned above

Answer: A)

```
def function_name(parameters):
    ...
    Statements
    ...
def function_name(parameters):
    ...
    Statements
    ...
```

53. Once we have defined a function, we can call it?

A. True
B. False

Answer: A) True

54. Amongst which of the following shows the types of function calls in Python?

A. Call by value
B. Call by reference
C. Both A and B
D. None of the mentioned above

Answer: C) Both A and B

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

```
def show(id,name):
    print("Your id is :",id,"and your name is :",name)

show(12,"deepak")
```

A. Your id is: 12 and your name is: deepak
B. Your id is: 11 and your name is: Deepak
C. Your id is: 13 and your name is: Deepak
D. None of the mentioned above

Answer: A) Your id is: 12 and your name is: deepak

56. Amongst which of the following is a function which does not have any name?

A. Del function
B. Show function
C. Lambda function
D. None of the mentioned above

Answer: C) Lambda function

57. Can we pass List as an argument in Python function?

A. Yes
B. No

Answer: A) Yes

58. A method refers to a function which is part of a class?

A. True
B. False

Answer: A) True

59. The return statement is used to exit a function?

A. True
B. False

Answer: A) True

60. Scope and lifetime of a variable declared in a function exist till the function exists?

A. True
B. False

Answer: A) True

61. File handling in Python refers the feature for reading data from the file and writing data into a file?

A. True
B. False

Answer: A) True

62. Amongst which of the following is / are the key functions used for file handling in Python?

A. open() and close()
B. read() and write()
C. append()
D. All of the mentioned above

Answer: D) All of the mentioned above

63. Amongst which of the following is / are needed to open an existing file?

A. filename
B. mode
C. Both A and B
D. None of the mentioned above

Answer: C) Both A and B

64. Binary files are stored in the form of 0s and 1s?

A. True
B. False

Answer: A) True

65. The function file_object.close() is used to ___.

A. To open the existing file
B. To append in an opened file
C. To close an opened file
D. None of the mentioned above

Answer: C) To close an opened file

66. Python always makes sure that any unwritten or unsaved data is written to the file before it is closed?

A. True
B. False

Answer: A) True

67. The write() method takes a string as an argument and ___.

A. writes it to the text file
B. read from the text file
C. append in a text file
D. None of the mentioned above

Answer: A) writes it to the text file

68. The seek() method is used to ___.

A. Saves the file in secondary storage
B. Position the file object at a particular position in a file
C. Deletes the file form secondary storage
D. None of the mentioned above

Answer: B) Position the file object at a particular position in a file

69. Amongst which of the following function is / are used to create a file and writing data?

A. append()
B. open()
C. close()
D. None of the mentioned above

Answer: B) open()

70. The readline() is used to read the data line by line from the text file.

A. True
B. False

Answer: A) True

71. The module Pickle is used to ___.

A. Serializing Python object structure
B. De-serializing Python object structure
C. Both A and B
D. None of the mentioned above

72. Amongst which of the following is / are the method of convert Python objects for writing data in a binary file?

A. set() method
B. dump() method
C. load() method
D. None of the mentioned above

Answer: B) dump() method

73. Amongst which of the following is / are the method used to unpickling data from a binary file?

A. load()
B. set() method
C. dump() method
D. None of the mentioned above

Answer: B) set() method

74. A text file contains only textual information consisting of ___.

A. Alphabets
B. Numbers
C. Special symbols
D. All of the mentioned above

Answer: D) All of the mentioned above

75. The writelines() method is used to write multiple strings to a file?

A. True
B. False

Answer: A) True

1. What is the maximum length of a Python identifier?
   A. 32
   B. 16
   C. 128
   D. No fixed length is specified.

No fixed length is specified by default for a Python identifier.

2. What will be the output of the following code snippet?

```
print(2**3 + (5 + 6)**(1 + 1))
```

   A. 129
   B. 8
   C. 121
   D. None of the above.

The above code will print 129 by following the BEDMAS rule of operator precedence.

3. What will be the datatype of the var in the below code snippet?

```
var = 10
print(type(var))
var = "Hello"
print(type(var))
```

   A. str and int
   B. int and int
   C. str and str
   D. int and str

Initially var stores 10, and so is of type int. After that it stores "Hello" which is of type string.

4. How is a code block indicated in Python?
   A. Brackets.
   B. Indentation.
   C. Key.
   D. None of the above.

A python code block is indicated through the use of indentation.

5. What will be the output of the following code snippet?

```
a = [1, 2, 3]
a = tuple(a)
a[0] = 2
print(a)
```

   A. [2, 2, 3]
   B. (2, 2, 3)
   C. (1, 2, 3)
   D. Error.

Since we convert a to a tuple and then try to change its content, we will get an error since tuples are immutable.

6. What will be the output of the following code snippet?

```
print(type(5 / 2))
print(type(5 // 2))
```

A. float and int
B. int and float
C. float and float
D. int and int

The 1st expression performs standard division so the result is stored as a float type. The 2nd expression performs integer division so the result is stored as int type.

7. What will be the output of the following code snippet?

```
a = [1, 2, 3, 4, 5]
sum = 0
for ele in a:
  sum += ele
print(sum)
```

A. 15
B. 0
C. 20
D. None of these

The above code calculates the sum of all elements in the list.

8. What will be the output of the following code snippet?

```
count = 0
while(True):
  if count % 3 == 0:
     print(count, end = " ")
  if(count > 15):
     break;
  count += 1
```

A. 0 1 2 15
B. Infinite Loop
C. 0 3 6 9 12 15
D. 0 3 6 9 12

The above code prints the multiples of 3 not greater than 15, and then breaks off.

9. Which of the following concepts is not a part of Python?

A. Pointers.
B. Loops.
C. Dynamic Typing.
D. All of the above.

Pointers as a concept is not a part of Python.

10. What will be the output of the following code snippet?

```
def solve(a, b):
  return b if a == 0 else solve(b % a, a)
print(solve(20, 50))
```

A. 10
B. 20
C. 50
D. 1

The above function basically calculates the gcd of 2 numbers recursively. The gcd of 20 and 50 is 10, so the answer is A.

11. What will be the output of the following code snippet?

```
def solve(a):
  a = [1, 3, 5]
a = [2, 4, 6]
print(a)
solve(a)
print(a)
```

A. [2, 4, 6]. [2, 4, 6]
B. [2, 4, 6], [1, 3, 5]
C. [1. 3. 5], [1, 3, 5]
D. None of these.

This is a consequence of "Pass by Object Reference" in Python.

12. What will be the output of the following code snippet?

```
def func():
  global value
  value = "Local"
  value = "Global"
func()
print(value)
```

A. Local
B. Global
C. None
D. Cannot be predicted

We set the value of "value" as Global. To change its value from inside the function, we use the global keyword along with "value" to change its value to local, and then print it.

13. Which of the following statements are used in Exception Handling in Python?

A. try
B. except
C. finally
D. All of the above

All the above statements are used for Exception Handling in Python.

14. What will be the output of the following code snippet?

```
a = 3
b = 1
print(a, b)
a, b = b, a
print(a, b)
```

A. 3 1 1 3
B. 3 1 3 1
C. 1 3 1 3
D. 1 3 3 1

The above code snippet swaps 2 numbers in Python.

15. Which of the following types of loops are not supported in Python?

A. for
B. while
C. do-while
D. None of the above

do-while loops are not explicitly a part of the Python language.

16. Which of the following is the proper syntax to check if a particular element is present in a list?

if ele in list
if not ele not in list
Both A and B
None of the above

Both A and B are valid syntaxes to check for the presence of an element in a list.

17. What will be the output of the following code snippet?

```
def thrive(n):
 if n % 15 == 0:
   print("thrive", end = " ")
 elif n % 3 != 0 and n % 5 != 0:
   print("neither", end = " ")
 elif n % 3 == 0:
   print("three", end = " ")
 elif n % 5 == 0:
   print("five", end = " ")
thrive(35)
thrive(56)
thrive(15)
thrive(39)
```

A. five neither thrive three
B. five neither three thrive
C. three three three three
D. five neither five neither

Multiples of both 3 and 5 prints thrive. Multiples of neither 3 nor 5 prints neither. Multiples of 3 prints three and multiple of 5 prints five.

18. What will be the output of the following code snippet?

```
def check(a):
  print("Even" if a % 2 == 0 else "Odd")
  check(12)
```

A. Even
B. Odd
C. Error
D. None

The program uses ternary operators to check if a given number is even or not.

19. What will be the output of the following code snippet?

```
example = ["Sunday", "Monday", "Tuesday", "Wednesday"];
print(example[-3:-1])
```

['Monday', 'Tuesday']
['Sunday', 'Monday']
['Tuesday', 'Wednesday']
['Wednesday', 'Monday']

This is an example of slicing with negative indexes in a list. [-3:-1] here is equivalent to slicing the 2nd and 3rd index(1-based indexing) of the list.

20. What will be the output of the following code snippet?

```
a = [1, 2]
print(a * 3)
```

A. Error
B. [1, 2]
C. [1, 2, 1, 2]
D. [1, 2, 1, 2, 1, 2]

The * operator is overloaded in python to perform replication operations for lists. So the same list gets replicated 3 times in total.

21. What will be the output of the following code snippet?

```
example = ["Sunday", "Monday", "Tuesday", "Wednesday"];
del example[2]
print(example)
```

A. ['Sunday', 'Monday', 'Tuesday', 'Wednesday']
B. ['Sunday', 'Monday', 'Wednesday']
C. ['Monday', 'Tuesday', 'Wednesday']
D. ['Sunday', 'Monday', 'Tuesday']

The del keyword deletes an element from a list at a given index.

22. What will be the type of the variable sorted_numbers in the below code snippet?

```
numbers = (4, 7, 19, 2, 89, 45, 72, 22)
sorted_numbers = sorted(numbers)
print(sorted_numbers)
```

A. List
B. Tuple
C. String
D. Int

sorted() function returns a list that contains all the elements in parameters in sorted order.

23. What will be the output of the following code snippet?

```
numbers = (4, 7, 19, 2, 89, 45, 72, 22)
sorted_numbers = sorted(numbers)
even = lambda a: a % 2 == 0
even_numbers = filter(even, sorted_numbers)
print(type(even_numbers))
```

A. filter
B. int
C. list
D. tuple

The filter function returns an object of type "filter".

24. What will be the output of the following code snippet?

```
numbers = (4, 7, 19, 2, 89, 45, 72, 22)
sorted_numbers = sorted(numbers)
odd_numbers = [x for x in sorted_numbers if x % 2 != 0]
print(odd_numbers)
```

A. [7, 19, 45, 89]
B. [2, 4, 22, 72]
C. [4, 7, 19, 2, 89, 45,72, 22]
D. [2, 4, 7, 19, 22, 45, 72, 89]

The above code basically forms a list containing the odd numbers in the numbers list, in sorted order.

25. What will be the output of the following code snippet?

```
def is_even(number):
  message =  f"{number} is an even number" if number % 2 == 0 else  f"{number} is an odd number"
 return message
print(is_even(54))
```

A. 54 is an even number
B. 54 is an odd number
C. number is an even number
D. number is an odd number

f strings in python are a method of formatting strings. The part enclosed in {} are replaced whatever value the parameter holds.

26. What will be the output of the following code snippet?

```
dict1 = {'first' : 'sunday', 'second' : 'monday'}
dict2 = {1: 3, 2: 4}
dict1.update(dict2)
print(dict1)
```

A. {'first': 'sunday', 'second': 'monday', 1: 3, 2: 4}
B. {'first': 'sunday', 'second': 'monday'}
C. {1: 3, 2: 4}
D. None of the above.

The update function in python merges the contents of 2 dictionaries and stores them in the invoking dictionary.

27. What will be the output of the following code snippet?

```
s = {1, 2, 3, 3, 2, 4, 5, 5}
print(s)
```

A. {1, 2, 3, 3, 2, 4, 5, 5}
B. {1, 2, 3, 4, 5}
C. None
D. {1, 5}

Sets in python store only unique elements within them, without any repetition.

28. What will be the output of the following code snippet?

```
a = {'Hello':'World', 'First': 1}
b = {val: k for k , val in a.items()}
print(b)
```

A. {'Hello':'World', 'First': 1}
B. {'World': 'Hello', 1: 'First'}
C. Can be both A or B
D. None of the above

This is an example of dict comprehension in Python, in which we are reversing the key-value pairs from the 1st dictionary into the second.

29. Which of the following functions converts date to corresponding time in Python?

A. strptime()
B. strftime()
C. Both A and B
D. None of the above

strptime() function in Python converts a date to its corresponding time in Python.

30. What will be the output of the following code snippet?

```
word = "Python Programming"
n = len(word)
word1 = word.upper()
word2 = word.lower()
converted_word = ""
for i in range(n):
 if i % 2 == 0:
   converted_word += word2[i]
 else:
   converted_word += word1[i]
print(converted_word)
```

A. pYtHoN PrOgRaMmInG
B. Python Programming
C. python programming
D. PYTHON PROGRAMMING

In this code snippet, we convert every element in odd index to lower case and every element in even index to uppercase.

31. What will be the output of the following code snippet?

```
a = "4, 5"
nums = a.split(',')
x, y = nums
int_prod = int(x) * int(y)
print(int_prod)
```

A. 20
B. 45
C. 54
D. 4,5

In this code snippet, we break the given string into its 2 integer components, and then find their product, considering them as integer types.

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

```
square = lambda x: x ** 2
a = []
for i in range(5):
   a.append(square(i))
print(a)
```

A. [0, 1, 4, 9, 16]
B. [1, 4, 9, 16, 25]
C. [0, 1, 2, 3, 4]
D. [1, 2, 3, 4, 5]

The above code snippet stores the 1st 5 perfect squares into a list. The perfect squares are evaluated using a lambda function.

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

```
def tester(*argv):
  for arg in argv:
    print(arg, end = ' ')
tester('Sunday', 'Monday', 'Tuesday', 'Wednesday')
```

A. Sunday
B. Wednesday
C. Sunday Monday Tuesday Wednesday
D. None of the above.

We pass a variable number of arguments into the function using *args, and then print their value.

34. As what datatype are the *args stored, when passed into a function?

A. List.
B. Tuple.
C. Dictionary.
D. None of the above.

***args are stored in Python as a tuple.**

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

```
def tester(**kwargs):
  for key, value in kwargs.items():
    print(key, value, end = " ")
tester(Sunday = 1, Monday = 2, Tuesday = 3, Wednesday = 4)
```

A. Sunday 1 Monday 2 Tuesday 3 Wednesday 4
B. Sunday 1
C. Wednesday 4
D. None of the above

We can pass multiple key-word arguments to a function using kwargs. Here, we print the arguments passed to the function in this code snippet.

36. As what datatype are the *kwargs stored, when passed into a function?

A. Lists.
B. Tuples.
C. Dictionary.
D. None of the above.

***kwargs are stored in Python as a dictionary.**

37. Which of the following blocks will always be executed whether an exception is encountered or not in a program?

A. try
B. except
C. finally
D. None of These

The finally block will always be executed in a program whether an exception has occurred or not.

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

```
from math import *
a = 2.19
b = 3.999999
c = -3.30
print(int(a), floor(b), ceil(c), fabs(c))
```

A. 2 3 -3 3.3
B. 3 4 -3 3
C. 2 3 -3 3
D. 2 3 -3 -3.3

Option A will be the correct answer for this code snippet.

39. What will be the output of the following code snippet?

```
set1 = {1, 3, 5}
set2 = {2, 4, 6}
print(len(set1 + set2))
```

A. 3
B. 6
C. 0
D. Error

The code will give an error since + operator is not overloaded for sets in Python.

40. What keyword is used in Python to raise exceptions?

A. raise
B. try
C. goto
D. except

The raise keyword is used in Python to throw exceptions.

41. What will be the output of the following code snippet?

```
s1 = {1, 2, 3, 4, 5}
s2 = {2, 4, 6}
print(s1 ^ s2)
```

A. {1, 2, 3, 4, 5}
B. {1, 3, 5, 6}
C. {2, 4}
D. None of the above

The ^ operator in sets will return a set containing common of elements of its operand sets.

42. Which of the following is not a valid set operation in python?
    A. Union
    B. Intersection
    C. Difference
    D. None of the above

All the above operations are valid set operations in Python.

43. What will be the output of the following code snippet?

```
a = [1, 2, 3, 4]
b = [3, 4, 5, 6]
c = [x for x in a if x not in b]
print(c)
```

    A. [1, 2]
    B. [5, 6]
    C. [1, 2, 5, 6]
    D. [3, 4]

Above code snippet prints the values in a, which are not present in b.

44. Which of the following are valid escape sequences in Python?
    A. \n
    B. \t
    C. \\
    D. All of the above

All of the above are valid escape sequences in Python.

45. Which of the following are valid string manipulation functions in Python?
    A. count()
    B. upper()
    C. strip()
    D. All of the above

All of the above are valid string manipulation functions in Python.

46. Which of the following modules need to be imported to handle date time computations in Python?
    A. datetime
    B. date
    C. time
    D. timedate

The datetime module needs to be imported to handle date time computations in Python.

47. How can assertions be disabled in Python?
    A. Passing -O when running Python.
    B. Assertions are disabled by default.
    C. Both A and B are wrong.
    D. Assertions cannot be disabled in Python.

Assertions can be disables in Python passing -O when running Python.

48. What will be the output of the following code snippet?

```
a = [[], "abc", [0], 1, 0]
print(list(filter(bool, a)))
```

    A. ['abc', [0], 1]
    B. [1]
    C. [“abc”]
    D. None of the above

The above code filters all the elements from list a, which evaluates to boolean value true, i.e. any non empty string, list or non-zero value is accepted.

49. In which language is Python written?
    A. C++
    B. C
    C. Java
    D. None of these

Python is written in the C language.

50. What will be the result of the following expression in Python “2 ** 3 + 5 ** 2”?
    A. 65536
    B. 33
    C. 169
    D. None of these

The above expression will be evaluated as 2^3 + 5^2 = 8 + 25 = 33.

1) What is the maximum possible length of an identifier?

a) 16
b) 32
c) 64
d) None of these above

2) Who developed the Python language?

a) Zim Den
b) Guido van Rossum
c) Niene Stom
d) Wick van Rossum

3) In which year was the Python language developed?

a) 1995
b) 1972
c) 1981
d) 1989

4) In which language is Python written?

a) English
b) PHP
c) C
d) All of the above

5) Which one of the following is the correct extension of the Python file?

a) .py
b) .python
c) .p
d) None of these

6) In which year was the Python 3.0 version developed?

a) 2008
b) 2000
c) 2010
d) 2005

7) What do we use to define a block of code in Python language?

a) Key
b) Brackets
c) Indentation
d) None of these

8) Which character is used in Python to make a single line comment?

a) /
b) //
c) #
d) !

9) Which of the following statements is correct regarding the object-oriented programming concept in Python?

a) Classes are real-world entities while objects are not real
b) Objects are real-world entities while classes are not real
c) Both objects and classes are real-world entities
d) All of the above

10) Which of the following statements is correct in this python code?

```
1. class Name:
2.     def __init__(javatpoint):
3.         javajavatpoint = java
4. name1=Name("ABC")
5. name2=name1
```

a) It will throw the error as multiple references to the same object is not possible

b) id(name1) and id(name2) will have same value

c) Both name1 and name2 will have reference to two different objects of class Name

d) All of the above

11) What is the method inside the class in python language?

a) Object

b) Function

c) Attribute

d) Argument

12) Which of the following declarations is incorrect?

a. _x = 2

b. __x = 3

c. __xyz__ = 5

d. None of these

13) Why does the name of local variables start with an underscore discouraged?

a) To identify the variable

b) It confuses the interpreter

c) It indicates a private variable of a class

d) None of these

14) Which of the following is not a keyword in Python language?

a) val
b) raise
c) try
d) with

15) Which of the following statements is correct for variable names in Python language?

a) All variable names must begin with an underscore.
b) Unlimited length
c) The variable name length is a maximum of 2.
d) All of the above

16) Which of the following declarations is incorrect in python language?

a) xyzp = 5,000,000
b) x y z p = 5000 6000 7000 8000
c) x,y,z,p = 5000, 6000, 7000, 8000
d) x_y_z_p = 5,000,000

17) Which of the following words cannot be a variable in python language?

a) _val
b) val
c) try
d) _try_

18) Which of the following operators is the correct option for power(ab)?

a) a ^ b
b) a**b
c) a ^ ^ b
d) a ^ * b

19) Which of the following precedence order is correct in Python?

a) Parentheses, Exponential, Multiplication, Division, Addition, Subtraction
b) Multiplication, Division, Addition, Subtraction, Parentheses, Exponential
c) Division, Multiplication, Addition, Subtraction, Parentheses, Exponential
d) Exponential, Parentheses, Multiplication, Division, Addition, Subtraction

20) Which one of the following has the same precedence level?

a) Division, Power, Multiplication, Addition and Subtraction
b) Division and Multiplication
c) Subtraction and Division
d) Power and Division

21) Which one of the following has the highest precedence in the expression?

a) Division
b) Subtraction
c) Power
d) Parentheses

22) Which of the following functions is a built-in function in python language?

a) val()
b) print()
c) print()
d) None of these

23) Study the following function:

1. round(4.576)

What will be the output of this function?

a) 4
b) 5
c) 576
d) 5

24) Which of the following is correctly evaluated for this function?

1. pow(x,y,z)

a) (x**y) / z

b) (x / y) * z

c) (x**y) % z

d) (x / y) / z

25) Study the following function:

1. all([2,4,0,6])

What will be the output of this function?

a) False

b) True

c) 0

d) Invalid code

26) Study the following program:

```
1. x = 1
2. while True:
3.     if x % 5 = = 0:
4.         break
5.     print(x)
6.     x + = 1
```

What will be the output of this code?

a) error

b) 2 1

c) 0 3 1

d) None of these

27) Which one of the following syntaxes is the correct syntax to read from a simple text file stored in ''d:\java.txt''?

a) Infile = open(''d:\\java.txt'', ''r'')
b) Infile = open(file=''d:\\\java.txt'', ''r'')
c) Infile = open(''d:\java.txt'',''r'')
d) Infile = open.file(''d:\\java.txt'',''r'')

28) Study the following code:

```
1. x = ['XX', 'YY']
2. for i in a:
3.     i.lower()
4. print(a)
```

What will be the output of this program?

a) ['XX', 'YY']
b) ['xx', 'yy']
c) [XX, yy]
d) None of these

29) Study the following function:

```
1. import math
2. abs(math.sqrt(36))
```

What will be the output of this code?

a) Error
b) -6
c) 6
d) 6.0

30) Study the following function:

```
1. any([5>8, 6>3, 3>1])
```

What will be the output of this code?

a) False
b) Ture
c) Invalid code
d) None of these

31) Study the following statement:

```
1. >>>"a"+"bc"
```

What will be the output of this statement?

a) a+bc
b) abc
c) a bc
d) a

32) Study the following code:

```
1. >>>"javatpoint"[5:]
```

What will be the output of this code?

a) javatpoint
b) java
c) point
d) None of these

33) The output to execute string.ascii_letters can also be obtained from:?

a) character
b) ascii_lowercase_string.digits
c) lowercase_string.upercase
d) ascii_lowercase+string.ascii_upercase

34) Study the following statements:

```
>>> str1 = "javat"
>>> str2 = ":"
>>> str3 = "point"
>>> str1[-1:]
```

What will be the output of this statement?

a) t
b) j
c) point
d) java

35) Study the following code:

```
>>> print (r"\njavat\npoint")
```

What will be the output of this statement?

1. java
   point
2. java point
3. \njavat\npoint
4. Print the letter r and then javat and then point

36) Study the following statements:

```
>>> print(0xA + 0xB + 0xC)
```

What will be the output of this statement?

a. 33
b. 63
c. 0xA + 0xB + 0xC
d. None of these

37) Study the following program:

```
class book:
   def __init__(a, b):
      a.o1 = b

class child(book):
   def __init__(a, b):
      a.o2 = b

obj = page(32)
print "%d %d" % (obj.o1, obj.o2)
```

Which of the following is the correct output of this program?

a) 32
b) 32 32
c) 32 None
d) Error is generated

38) Study the following program:

```
class Std_Name:
   def __init__(self, Std_firstName, Std_Phn, Std_lastName):
      self.Std_firstName = Std_firstName
      self. Std_PhnStd_Phn = Std_Phn
      self. Std_lastNameStd_lastName = Std_lastName

Std_firstName = "Wick"
name = Std_Name(Std_firstName, 'F', "Bob")
Std_firstName = "Ann"
name.lastName = "Nick"
print(name.Std_firstName, name.Std_lastName)
```

What will be the output of this statement?

a. Ann Bob

b. Ann Nick

c. Wick Bob

d. Wick Nick

39) Study the following statements:

```
>>> print(ord('h') - ord('z'))
```

What will be the output of this statement?

a. 18

b. -18

c. 17

d. -17

40) Study the following program:

```
x = ['xy', 'yz']
for i in a:
    i.upper()
print(a)
```

Which of the following is correct output of this program?

a. ['xy', 'yz']

b. ['XY', 'YZ']

c. [None, None]

d. None of these

41) Study the following program:

```
i = 1:
while True:
    if i%3 == 0:
        break
    print(i)
```

Which of the following is the correct output of this program?

a. 1 2 3

b. 3 2 1

c. 1 2

d. Invalid syntax

42) Study the following program:

```
a = 1
while True:
    if a % 7 = = 0:
        break
    print(a)
    a += 1
```

Which of the following is correct output of this program?

a. 1 2 3 4 5

b. 1 2 3 4 5 6

c. 1 2 3 4 5 6 7

d. Invalid syntax

43) Study the following program:

```
i = 0
while i < 5:
    print(i)
    i += 1
    if i == 3:
        break
else:
    print(0)
```

What will be the output of this statement?

a. 1 2 3

b. 0 1 2 3

c. 0 1 2

d. 3 2 1

44) Study the following program:

```
i = 0
while i < 3:
    print(i)
    i += 1
else:
    print(0)
```

What will be the output of this statement?

a) 0 1
b) 0 1 2
c) 0 1 2 0
d) 0 1 2 3

45) Study the following program:

```
z = "xyz"
j = "j"
while j in z:
    print(j, end=" ")
```

What will be the output of this statement?

a) xyz
b) No output
c) x y z
d) j j j j j j j..

46) Study the following program:

```
x = 'pqrs'
for i in range(len(x)):
    x[i].upper()
print (x)
```

Which of the following is the correct output of this program?

a. PQRS

b. pqrs

c. qrs

d. None of these

47) Study the following program:

```
1. d = {0: 'a', 1: 'b', 2: 'c'}
2. for i in d:
3.     print(i)
```

What will be the output of this statement?

a. a b c

b. 0 1 2

c. 0 a 1 b 2 c

d. None of these above

48) Study the following program:

```
1. d = {0, 1, 2}
2. for x in d:
3.     print(x)
```

What will be the output of this statement?

a. {0, 1, 2} {0, 1, 2} {0, 1, 2}

b. 0 1 2

c. Syntax_Error

d. None of these above

49) Which of the following option is not a core data type in the python language?

a. Dictionary

b. Lists

c. Class

d. All of the above

50) What error will occur when you execute the following code?

```
1. MANGO = APPLE
```

a. NameError

b. SyntaxError

c. TypeError

d. ValueError

51) Study the following program:

```
1. def example(a):
2.     aa = a + '1'
3.     aa = a*1
4.     return a
5. >>>example("javatpoint")
```

What will be the output of this statement?

a. hello2hello2

b. hello2

c. Cannot perform mathematical operation on strings

d. indentationError

52) Which of the following data types is shown below?

```
1. L = [2, 54, 'javatpoint', 5]
```

What will be the output of this statement?

a. Dictionary

b. Tuple

c. List

d. Stack

53) What happens when '2' == 2 is executed?

a. False

b. Ture

c. ValueError occurs

d. TypeError occurs

54) Study the following program:

```
try:
    if '2' != 2:
        raise "JavaTpoint"
    else:
        print("JavaTpoint has not exist")
except "JavaTpoint":
    print ("JavaTpoint has exist")
```

What will be the output of this statement?

a. invalid code

b. JavaTpoint has not exist

c. JavaTpoint has exist

d. none of these above

55) Study the following statement

```
z = {"x":0, "y":1}
```

Which of the following is the correct statement?

a. x dictionary z is created

b. x and y are the keys of dictionary z

c. 0 and 1 are the values of dictionary z

d. All of the above

Python MCQ Part - 2

1) Study the following program:

```
1. print(print(print("javatpoint")))
```

What will be the output of this program?

a. javatpoint None None
b. None None javatpoint
c. None javatpoint None
d. Javatpoint

2) Study the following program:

```
1. print(True ** False / True)
```

What will be the output of this program?

a. True ** False / True
b. 1.0
c. 1 ** 0 / 1
d. None of the these

3) Study the following program:

```
1. int1 = 10
2. int2 = 6
3. if int != int2:
4.     int2 = ++int2
5.     print(int1 - int2)
```

What will be the output of this program?

a. 2
b. 4
c. 6
d. None

4) Study the following program:

```
1. int1 = 10
2. int2 = 6
3. if int != int2:
4.     int2 = ++int1
5.     print(int1 - int2)
```

What will be the output of this program?

a. 2

b. 4

c. 0

d. No Output

5) Study the following program:

```
1. print(6 + 5 - 4 * 3 / 2 % 1)
```

What will be the output of this program?

a. 7

b. 7.0

c. 15

d. 0

6) Study the following program:

```
1. int1 = 0b0010
2. print(int1)
```

What will be the output of this program?

a. 0b0010

b. 2

c. NameError: name '0b0010' is not defined

d. SyntaxError

7) Study the following program:

```
1. word = "javatpoint"
2. print(*word)
```

What will be the output of this program?

a. javatpoint

b. j a v a t p o i n t

c. *word

d. SyntaxError: invalid syntax

8) Study the following program:

```
1. i = 2, 10
2. j = 3, 5
3. add = i + j
4. print(add)
```

What will be the output of this program?

a. (5, 10)

b. 20

c. (2, 10, 3, 5)

d. SyntaxError: invalid syntax

9) Study the following program:

```
1. print(int(6 == 6.0) * 3 + 4 % 5)
```

What will be the output of this program?

a. 22

b. 18

c. 20

d. 7

10) Study the following program:

```
1. i = 2
2. j = 3, 5
3. add = i + j
4. print(add)
```

What will be the output of this program?

a. 5, 5

b. 5

c. (2 , 3 , 5)

d. TypeError

11) How many control statements python supports?

a. Four

b. Five

c. Three

d. None of the these

12) How many keywords present in the python programming language?

a. 32

b. 61

c. 33

d. 27

13) Which of the following arithmetic operators cannot be used with strings in python?

a. +

b. *

c. -

d. All of the mentioned

14) Study the following program:

```
1. print("java", 'point', sep='2')
```

What will be the output of this program?

a. javapoint2
b. japoint
c. java2point
d. javapoin2

15) Study the following program:

```
1. print('It\'s ok, don\'t worry')
```

What will be the output of this program?

a. It's ok, don't worry
b. It\'s ok, don\'t worry
c. SyntaxError: EOL while scanning string literal
d. SyntaxError: invalid syntax

16) Study the following program:

```
1. _ = '1 2 3 4 5 6'
2. print(_)
```

What will be the output of this program?

a. SyntaxError: EOL while scanning string literal
b. SyntaxError: invalid syntax
c. NameError: name '_' is not defined
d. 1 2 3 4 5 6

17) Which of the following keywords is not reversed keyword in python?

a. None
b. class
c. goto
d. and

18) Study the following program:

```
1. a = '1 2'
2. print(a * 2)
3. print(a * 0)
4. print(a * -2)
```

What will be the output of this program?

a. 1 2 1 2

b. 2 4

c. 0

d. -1 -2 -1 -2

19) Study the following program:

```
1. print(max("zoo 145 com"))
```

What will be the output of this program?

a. 145

b. 122

c. a

d. z

20) Study the following program:

```
1. a = "123789"
2. while x in a:
3.     print(x, end=" ")
```

What will be the output of this program?

a. i i i i i i ...

b. 123789

c. SyntaxError

d. NameError

21) PVM is often called _____.

a. Python interpreter

b. Python compiler

c. Python volatile machine

d. Portable virtual machine

22) Study the following program:

```
1. i = {4, 5, 6}
2. i.update({2, 3, 4})
3. print(i)
```

What will be the output of this program?

a. 2 3 4 4 5 6

b. 2 3 4 5 6

c. 4 5 6 2 3 4

d. Error, duplicate element presents in list

23) Study the following program:

```
1. i=(12, 20, 1, 0, 25)
2. i.sort()
3. print(i)
```

What will be the output of this program?

a. 0 1 12 20 25

b. 1 12 20 25

c. FunctionError

d. AttributeError

24) Which of the following keywords is used for function declaration in Python language?

a. def

b. function_name

c. define

d. None of the these

25) Which of the following objects are present in the function header in python?

a. Function name and Parameters

b. Only function name

c. Only parameters

d. None of the these

26) When a user does not use the return statement inside a function in Python, what will return the function in that case.

a. 0

b. 1

c. None

d. No output

27) Which one of the following is the right way to call a function?

a. call function_name()

b. function function_name()

c. function_name()

d. None of the these

28) Suppose a user wants to print the second value of an array, which has 5 elements. What will be the syntax of the second value of the array?

a. array[2]

b. array[1]

c. array[-1]

d. array[-2]

29) Study the following program:

```
1. str1="python language"
2. str1.find("p")
3. print(str1)
```

What will be the output of this program?

a. Print the index value of the p.

b. p

c. python language

d. AttributeError

30) Study the following program:

```
1. flag = ""
2. a = 0
3. i = 1
4. while(a < 3):
5.     j = 1
6.     if flag:
7.         i = j * i + 5
8.     else:
9.         i = j * i + 1
10.    a = a + 1
11. print(i)
```

What will be the output of this program?

a. 12

b. 4

c. 11

d. 16

31) Study the following expression:

```
1. str = [(1, 1), (2, 2), (3, 3)]
```

What type of data is in this expression?

a. String type

b. Array lists

c. List of tuples

d. str lists

32) Which of the following statements is not valid regarding the variable in python?

a. The variable_name can begin with alphabets

b. The variable_name can begin with an underscore

c. The variable_name can begin with a number

d. None of the these

33) Study the following program:

```
a = 2
while(a > -100):
    a = a - 1
    print(a)
```

How many times will this program run the loop?

a. Infinite

b. 102

c. 2

d. 1

34) Study the following program:

```
arr = [3 , 2 , 5 , 6 , 0 , 7, 9]
add1 = 0
add2 = 0
for elem in arr:
    if (elem % 1 == 0):
        add1 = add1 + elem
        continue
    if (elem % 3 == 0):
        add2 = add2 + elem
print(add1 , end=" ")
print(add2)
```

What will be the output of this program?

a. 32 0

b. 0 32

c. 18 0

d. 0 18

35) Which of the following statements is valid for "if statement"?

a. if f >= 12:

b. if (f >= 122)

c. if (f => 1222)

d. if f >= 12222

36) Which of the following blocks allows you to test the code blocks for errors?

a. except block

b. try block

c. finally block

d. None of the these

37) Study the following program:

```
try:
  print(file_name)
except:
  print("error comes in the line")
```

What will be the output of this program?

a. file_name

b. error

c. error comes in the line

d. file_name error comes in the line

38) Study the following program:

```
i = 10
j = 8
assert i > j, 'j = i + j'
print(j)
```

What will be the output of this program?

a. 18

b. 8

c. No output

d. TypeError

39) Study the following program:

```
1. class Student:
2.     print("Students of Section A")
3. Student()
4. Student()
5. obj = Student()
```

How many objects are there for the given program?

a. 1

b. 2

c. 3

d. None of the these

40) Study the following program:

```
1. class Teacher:
2.     def __init__(name, id_no, age):
3.         name.id_no = id_no
4.         name.age = age
5. teac = Teacher(5, 25)
```

Which of the following statements is incorrect regarding this program?

a. A constructor has been given in this program

b. id_no and age are called the parameters

c. The "teac" is the reference variable for the object Teacher(5, 25)

d. None of the these

41) Study the following program:

```
1. class Teacher:
2.     def __init__(self, id, age):
3.         self.id = id
4.         self.age = age
5.         print(self.age)
6. tear = Teacher("John", 20)
7. tear.age = 30
8. print(tear.age)
```

Which of the following statements is incorrect regarding this program?

a. 20 John 30

b. 20 30

c. John 30

d. 30 John 20

42) Which of the following code will create a set in python language?

1. thisset = (("apple", "banana", "cherry"))

2. thisset = ("car", "bike", "123")

3. thisset = {}

a. 1 only

b. 1 and 2 both

c. 1, 2, and 3 will create a set

d. None of the these

43) Study the following program:

```
1. set = {0, 0, "a1", 0, 9}
2. print(set)
```

What will be the output of this program?

a. {0, 0, 'a1', 0, 9}

b. {0, 'a1', 0, 9}

c. {0, 9, 'a1'}

d. {0, 0, 9, 0, 'a1'}

44) Which of the following statements would create a tuple in python?

a. mytuple = ("apple", "banana", "cherry")

b. mytuple[123] = ("apple", "banana", "cherry")

c. mytuple = ("2" * ("apple", "banana", "cherry"))

d. None of the these

45) Study the following program:

```
1. mytuple1=(5, 1, 7, 6, 2)
2. mytuple1.pop(2)
3. print(mytuple1)
```

What will be the output of this program?

a. 5 1 7 6 2

b. No output

c. AttributeError

d. None of the these

46) Which of the following functions returns a list containing all matches?

a) find

b) findall

c) search

d) None of the these

47) Study the following program:

```
1. mytuple1 = (2, 4, 3)
2. mytuple3 = mytuple1 * 2
3. print(mytuple3)
```

What will be the output of this program?

a) (2, 4, 3, 2, 4, 3)

b) (2, 2, 4, 4, 3, 3)

c) (4, 8, 6)

d) Error

48) In the Python Programming Language, syntax error is detected by _____ at _____.

a) Interpreter / Compile time
b) Run time / Interpreter
c) Interpreter / Run time
d) Compile time / Run time

49) Study the following program:

```
1. i = [10, 11, 12, 13]
2. for i[-2] in i:
3.     print(i[-2])
```

What will be the output of this program?

a) 10 11 11 12
b) 10 11 11 13
c) 10 8 6 4
d) SyntaxError

50) Which of the following blocks allows you to handle the errors?

a) except block
b) try block
c) finally block
d) None of the these

1. When was Python released?

1. 16 October, 2001
2. 16 October 2000
3. 17 October 2000
4. 17 October 2001

Answer. b. 16 October 2000. The idea of Python was conceived in the later 1980s, but it was released on a. 16 October 2000.

2. When was Python 3.0 released?

1. 3 December 2008
2. 4 December 2008
3. 5 December 2008
4. 3 December 2010

Answer. a. The new version of Python 3.0 was released on December 3, 2008.

3. Who founded Python?

1. Alexander G. Bell
2. Vincent van Gogh
3. Leonardo da Vinci
4. Guido van Rossum

Answer. d. The idea of Python was conceived by Guido van Rossum in the later 1980s.

4. What is Python?

1. A programming language
2. Computer language
3. Binary language
4. None of the above

Answer. a. Python is a programming language, basically a very high-level and a general-purpose language.

5. What does the name Python signify?

1. It is a snake
2. It is very difficult to use
3. Named after the British comedy group Monty Python
4. All of the above

Answer. c. It is named after a British comedy group called the Monty Python to signify that it is very easy to use.

6. What are the people who specialize in Python called?

1. Pythonic
2. Unpythonic
3. Monty Python
4. Pythoniasts

Answer. d. the people who specialize, or are great admirers of this programming language are called as Pythoniasts. They are extremely knowledgeable people.

8. What is the type of programming language supported by Python?

1. Object-oriented
2. Functional programming
3. Structured programming
4. All of the above

Answer. d. Python is an interpreted programming language, supporting object-oriented, structured, and functional programming.

9. When Python is dealing with identifiers, is it case sensitive?

1. Yes
2. No
3. Machine dependent
4. Can't say

Answer. a. It is case sensitive.

10. What is the extension of the Python file?

1. .pl
2. .py
3. .python
4. .p

Answer. b. The correct extension of python is .py and can be written in any text editor. We need to use the extension .py to save these files.

11. All the keywords in Python are in_

1. Lower case
2. Upper case
3. Capitalized
4. None of the above

Answer. d. Only True, False and None are capitalized and all the others in lower case.

12. What does pip mean in Python?

1. Unlimited length
2. All private members must have leading and trailing underscores
3. Preferred Installer Program
4. None of the above

Answer. c. Variable names can be of any length.

13. The built-in function in Python is:

1. Print ()
2. Seed ()
3. Sqrt ()
4. Factorial ()

Answer. a. The function seed is a function which is present in the random module. The functions sqrt and factorial are a part of the math module. The print function is a built-in function which prints a value directly to the system output.

14. Which of the following definitions is the one for packages in Python?

1. A set of main modules
2. A folder of python modules
3. Set of programs making use of python modules
4. Number of files containing python definitions and statements

Answer. b. A folder of python modules is called as package of modules

15. What is the order in which namespaces in Python looks for an identifier?

1. First, the python searches for the built-in namespace, then the global namespace and then the local namespace
2. Python first searches for the built-in namespace, then local and finally the global namespace
3. Python first searches for local namespace, then global namespace and finally the built-in namespace
4. Python searches for the global namespace, followed by the local namespace and finally the built-in namespace.

Answer. C. Python first searches for the local namespace, followed by the global and finally the built-in namespace.

16. **Which of the following is not a keyword used in Python language?**

1. Pass
2. Eval
3. Assert
4. Nonlocal

Answer. b. Eval is used as a variable in Python.

17. **Which of the following is the use of function in python?**

1. Functions do not provide better modularity for applications
2. One can't create our own functions
3. Functions are reusable pieces of programs
4. All of the above

Answer. c. Functions are reusable pieces of programs, which allow us to give a name to a particular block of statements, allowing us to run the block using the specified name anywhere in our program and any number of times.

18. **Which of the following is a feature of Python DocString?**

1. All functions should have a docstring in python
2. DocStrings can be accessed by the _doc_ attribute on objects
3. This feature provides a very convenient way of associating documentation with python modules, functions, classes and methods
4. All of the above

Answer. d. Python has a nifty feature, which is referred to as the documentation strings, usually referred to by its abbreviated name of docstrings. They are important tools and one must use them as they help document the program better along with making it easier to understand.

19. **Which of the following is the use of the function id() in python?**

1. Every object does not have a unique id in Python
2. The id function in python returns the identity of the object
3. None
4. All

Answer. b. Every function in Python has a unique id. The id() function helps return the id of the object.

20. What is the function of pickling in python?

1. Conversion of a python object
2. Conversion of database into list
3. Conversion of byte stream into python object hierarchy
4. Conversion of list into database

Answer. a. The process of pickling refers to sterilizing a Python object, which means converting a byte stream into python object hierarchy. The process which is the opposite of pickling is called unpickling.

21. What is Python code-compiled or interpreted?

1. The code is both compiled and interpreted
2. Neither compiled nor interpreted
3. Only compiled
4. Only interpreted

Answer. b. There are a lot of languages which have been implemented using both compilers and interpreters, including C, Pascal, as well as python.

Python MCQ (Multiple Choice Questions)

1. Who developed Python Programming Language?
a) Wick van Rossum
b) Rasmus Lerdorf
c) Guido van Rossum
d) Niene Stom

2. Which type of Programming does Python support?
a) object-oriented programming
b) structured programming
c) functional programming
d) all of the mentioned

3. Is Python case sensitive when dealing with identifiers?
a) no
b) yes
c) machine dependent
d) none of the mentioned

4. Which of the following is the correct extension of the Python file?
a) .python
b) .pl
c) .py
d) .p

5. Is Python code compiled or interpreted?
a) Python code is both compiled and interpreted
b) Python code is neither compiled nor interpreted
c) Python code is only compiled
d) Python code is only interpreted

6. All keywords in Python are in _____
a) Capitalized
b) lower case
c) UPPER CASE
d) None of the mentioned

7. What will be the value of the following Python expression?
4 + 3 % 5
a) 7
b) 2
c) 4
d) 1

8. Which of the following is used to define a block of code in Python language?
a) Indentation
b) Key
c) Brackets
d) All of the mentioned

9. Which keyword is used for function in Python language?
a) Function
b) def
c) Fun
d) Define

10. Which of the following character is used to give single-line comments in Python?
a) //
b) #
c) !
d) /*

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

```
i = 1
while True:
    if i%3 == 0:
        break
    print(i)

    i + = 1
```

a) 1 2 3
b) error
c) 1 2
d) none of the mentioned

12. Which of the following functions can help us to find the version of python that we are currently working on?
a) sys.version(1)
b) sys.version(0)
c) sys.version()
d) sys.version

13. Python supports the creation of anonymous functions at runtime, using a construct called _____
a) pi
b) anonymous
c) lambda
d) none of the mentioned

14. What is the order of precedence in python?
a) Exponential, Parentheses, Multiplication, Division, Addition, Subtraction
b) Exponential, Parentheses, Division, Multiplication, Addition, Subtraction
c) Parentheses, Exponential, Multiplication, Division, Subtraction, Addition
d) Parentheses, Exponential, Multiplication, Division, Addition, Subtraction

15. What will be the output of the following Python code snippet if x=1?

```
x<<2
```

a) 4
b) 2
c) 1
d) 8

16. What does pip stand for python?
a) Pip Installs Python
b) Pip Installs Packages
c) Preferred Installer Program
d) All of the mentioned

17. Which of the following is true for variable names in Python?
a) underscore and ampersand are the only two special characters allowed
b) unlimited length
c) all private members must have leading and trailing underscores
d) none of the mentioned

18. What are the values of the following Python expressions?

```
2**(3**2)
(2**3)**2
2**3**2
```

a) 512, 64, 512
b) 512, 512, 512
c) 64, 512, 64
d) 64, 64, 64

19. Which of the following is the truncation division operator in Python?
a) |
b) //
c) /
d) %

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

```
l=[1, 0, 2, 0, 'hello', '', []]
list(filter(bool, l))
```

a) [1, 0, 2, ‘hello’, ”, []]
b) Error
c) [1, 2, ‘hello’]
d) [1, 0, 2, 0, ‘hello’, ”, []]

21. Which of the following functions is a built-in function in python?
a) factorial()
b) print()
c) seed()
d) sqrt()

22. Which of the following is the use of id() function in python?
a) Every object doesn’t have a unique id
b) Id returns the identity of the object
c) All of the mentioned
d) None of the mentioned

23. The following python program can work with ____ parameters.

```
def f(x):
    def f1(*args, **kwargs):
            print("Sanfoundry")
            return x(*args, **kwargs)
    return f1
```

a) any number of
b) 0
c) 1
d) 2

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

```
min(max(False,-3,-4), 2,7)
```

a) -4
b) -3
c) 2
d) False

25. Which of the following is not a core data type in Python programming?
a) Tuples
b) Lists
c) Class
d) Dictionary

26. What will be the output of the following Python expression if x=56.236?

```
print("%.2f"%x)
```

a) 56.236
b) 56.23
c) 56.0000
d) 56.24

27. Which of these is the definition for packages in Python?
a) A set of main modules
b) A folder of python modules
c) A number of files containing Python definitions and statements
d) A set of programs making use of Python modules

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

```
len(["hello",2, 4, 6])
```

a) Error
b) 6
c) 4
d) 3

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

```
x = 'abcd'
for i in x:
    print(i.upper())
```

a) A
B
C
D
b) a b c d
c) error
d) A
B
C
D

30. What is the order of namespaces in which Python looks for an identifier?
a) Python first searches the built-in namespace, then the global namespace and finally the local namespace
b) Python first searches the built-in namespace, then the local namespace and finally the global namespace
c) Python first searches the local namespace, then the global namespace and finally the built-in namespace
d) Python first searches the global namespace, then the local namespace and finally the built-in namespace

31. What will be the output of the following Python code snippet?

```
for i in [1, 2, 3, 4][::-1]:
    print (i)
```

a) 4 3 2 1
b) error
c) 1 2 3 4
d) none of the mentioned

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

```
1. >>>"a"+"bc"
```

a) bc
b) abc
c) a
d) bca

33. Which function is called when the following Python program is executed?

```
f = foo()
format(f)
```

a) str()
b) format()
c) __str__()
d) __format__()

34. Which one of the following is not a keyword in Python language?
a) pass
b) eval
c) assert
d) nonlocal

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

```
1. class tester:
2.     def __init__(self, id):
3.         self.id = str(id)
4.         id="224"
5.
6. >>>temp = tester(12)
7. >>>print(temp.id)
```

a) 12
b) 224
c) None
d) Error

36. What will be the output of the following Python program?

```
def foo(x):
    x[0] = ['def']
    x[1] = ['abc']
    return id(x)
q = ['abc', 'def']
print(id(q) == foo(q))
```

a) Error
b) None
c) False
d) True

37. Which module in the python standard library parses options received from the command line?
a) getarg
b) getopt
c) main
d) os

38. What will be the output of the following Python program?

```
z=set('abc')
z.add('san')
z.update(set(['p', 'q']))
z
```

a) {‘a’, ‘c’, ‘c’, ‘p’, ‘q’, ‘s’, ‘a’, ‘n’}
b) {‘abc’, ‘p’, ‘q’, ‘san’}
c) {‘a’, ‘b’, ‘c’, ‘p’, ‘q’, ‘san’}
d) {‘a’, ‘b’, ‘c’, [‘p’, ‘q’], ‘san}

39. What arithmetic operators cannot be used with strings in Python?
a) *
b) –
c) +
d) All of the mentioned

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

```
print("abc. DEF".capitalize())
```

a) Abc. def
b) abc. def
c) Abc. Def
d) ABC. DEF

41. Which of the following statements is used to create an empty set in Python?
a) ( )
b) [ ]
c) { }
d) set()

42. What will be the value of 'result' in following Python program?

```
list1 = [1,2,3,4]
list2 = [2,4,5,6]
list3 = [2,6,7,8]
result = list()
result.extend(i for i in list1 if i not in (list2+list3) and i not in result)
result.extend(i for i in list2 if i not in (list1+list3) and i not in result)
result.extend(i for i in list3 if i not in (list1+list2) and i not in result)
```

a) [1, 3, 5, 7, 8]
b) [1, 7, 8]
c) [1, 2, 4, 7, 8]
d) error

43. To add a new element to a list we use which Python command?
a) list1.addEnd(5)
b) list1.addLast(5)
c) list1.append(5)
d) list1.add(5)

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

```
print('*', "abcde".center(6), '*', sep='')
```

a) * abcde *
b) *abcde *
c) * abcde*
d) * abcde *

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

```
1. >>>list1 = [1, 3]
2. >>>list2 = list1
3. >>>list1[0] = 4
4. >>>print(list2)
```

a) [1, 4]
b) [1, 3, 4]
c) [4, 3]
d) [1, 3]

46. Which one of the following is the use of function in python?
a) Functions don't provide better modularity for your application
b) you can't also create your own functions
c) Functions are reusable pieces of programs
d) All of the mentioned

47. Which of the following Python statements will result in the output: 6?

```
A = [[1, 2, 3],
     [4, 5, 6],
     [7, 8, 9]]
```

a) A[2][1]
b) A[1][2]
c) A[3][2]
d) A[2][3]

48. What is the maximum possible length of an identifier in Python?
a) 79 characters
b) 31 characters
c) 63 characters
d) none of the mentioned

49. What will be the output of the following Python program?

```
i = 0
while i < 5:
    print(i)
    i += 1
    if i == 3:
        break
else:
    print(0)
```

a) error
b) 0 1 2 0
c) 0 1 2
d) none of the mentioned

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

```
x = 'abcd'
for i in range(len(x)):
    print(i)
```

a) error
b) 1 2 3 4
c) a b c d
d) 0 1 2 3

51. What are the two main types of functions in Python?
a) System function
b) Custom function
c) Built-in function & User defined function
d) User function

52. What will be the output of the following Python program?

```
def addItem(listParam):
    listParam += [1]

mylist = [1, 2, 3, 4]
addItem(mylist)
print(len(mylist))
```

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

53. Which of the following is a Python tuple?
a) {1, 2, 3}
b) {}
c) [1, 2, 3]
d) (1, 2, 3)

54. What will be the output of the following Python code snippet?

```
z=set('abc$de')
'a' in z
```

a) Error
b) True
c) False
d) No output

55. What will be the output of the following Python expression?

```
round(4.576)
```

a) 4
b) 4.6
c) 5
d) 4.5

56. Which of the following is a feature of Python DocString?
a) In Python all functions should have a docstring
b) Docstrings can be accessed by the __doc__ attribute on objects
c) It provides a convenient way of associating documentation with Python modules, functions, classes, and methods
d) All of the mentioned

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

```
print("Hello {0[0]} and {0[1]}".format(('foo', 'bin')))
```

a) Hello (‘foo’, ‘bin’) and (‘foo’, ‘bin’)
b) Error
c) Hello foo and bin
d) None of the mentioned

58. What is output of print(math.pow(3, 2))?
a) 9.0
b) None
c) 9
d) None of the mentioned

59. Which of the following is the use of id() function in python?
a) Every object in Python doesn't have a unique id
b) In Python Id function returns the identity of the object
c) None of the mentioned
d) All of the mentioned

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

```
x = [[0], [1]]
print((' '.join(list(map(str, x))),))
```

a) 01
b) [0] [1]
c) ('01')
d) ('[0] [1]',)

61. The process of pickling in Python includes _____
a) conversion of a Python object hierarchy into byte stream
b) conversion of a datatable into a list
c) conversion of a byte stream into Python object hierarchy
d) conversion of a list into a datatable

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

```
def foo():
    try:
        return 1
    finally:
        return 2
k = foo()
print(k)
```

a) error, there is more than one return statement in a single try-finally block
b) 3
c) 2
d) 1