REVISION TOUR – PART 1

1	State True of False: In Python, data type of 88 is same as the data type of 88.0
2	Which of the following expression in Python evaluates to True? (A) 2>3 and 2<3 (B) 3>1 and 2 (C) 3>1 and 3>2 (D) 3>1 and 3<2
3	What the different execution mode in Python?
4	Solve the following expression: (A) print(14%3**2*4) (B) print(16*5/4*2/5-8) (C) print(4+3*5/3-5%2)
5	Which of the following is not a valid relational operator used with WHERE clause in SQL ? (A) > (B) <= (C) => (D)<>
6	What is the difference between = and == in Python? Give an example of each.
7	What is the difference between / and // operator? Explain with example
8	Give an example of each of the following : (i) An expression using any one identity operator. (ii) An arithmetic expression which uses any one augmented assignment operator.
9	What is the value of the following expression ? 3 + 3·00, 3**3·0 (A) [6·0, 27·0] (B) (6·0, 9·0) (C) (6, 27) (D) (6·0, 27·0)
10	Explain ordered and unordered collection with example
11	Identify the statement from the following which will raise an error : (a) `print("A"*3)` (b) `print(5*3)` (c) `print("15" + 3)` (d) `print("15" + "13")`
12	Identify the invalid Python statement out of the following options : (A) `print("A",10,end="*")` (B) `print("A",sep="*",10)` (C) `print("A",10,sep="*")` (D) `print("A"*10)`
13	Which of the following operator evaluates to **`True`** if the variable on either side of the operator points towards the same memory location and **`False`** otherwise ? (A) `is` (B) `is not` (C) `and` (D) `or`

14	Consider the statements given below and then choose the correct output from the given options :
	`N='5'`
	`try:`
	`  print('WORD' + N, end='#')`
	`except:`
	`  print('ERROR',end='#')`
	`finally:`
	`  print('OVER')`
	(A) `ERROR#` (B) `WORD5#OVER`
	(C) `WORD5#` (D) `ERROR#OVER`

15	Write one example of each of the following in Python : (i) Syntax Error (ii) Implicit Type Conversion
16	A) State True or False. "Identifiers are names used to identify a variable, function in a program". B) State True or False: "A Python List must always contain all its elements of same data type".
17	Consider the given expression : `5<10 and 12>7 or not 7>4` Which of the following will be the correct output, if the given expression is evaluated ? (a) `True` (b) `False` (c) `NONE` (d) `NULL`
18	Which of the following operators will return either True or False ? (a) += (b) != (c) = (d) *=
19	What is the difference between Keyword and Identifier? Explain with example
20	What is comment? What are the different ways to give comment? Explain with example.
21	Explain and 3 data types of Python with example.
22	What is membership operator? Explain with example
23	Explain Runtime Error and Logical Error with example
24	What is type conversion? What are the different method of type conversion? Illustrate with example
25	Explain Mutable and Immutable data type with example.

REVISION TOUR – PART 2

1	Identify the output of the following code snippet: s=”the Truth” print(s.capitalize()) (A) The truth (B) THE TRUTH (C) The Truth (D) the Truth
2	s=”War and Peace by Leo Tolstoy’ print(s.partition(“by”)) (A) (‘War and Peace ’,’by’,’ Leo Tolstoy’) (B) [‘War and Peace ’,’by’,’ Leo Tolstoy’] (C) (‘War and Peace ’,’ Leo Tolstoy’) (D) [‘War and Peace ’,’ Leo Tolstoy’]
3	What will be the output of the following code snippet: t=tuple(‘tuple’) t2=t[2], t+=t2 print(t) (A) (‘tuple’) (B) (‘tuple’,’p’) (C) (‘t’,’u’,’p’,’l’,’e’,’p’) (D) (‘t’,’u’,’p’,’l’,’e’)
4	Which of the following statement is true about dictionaries in Python? 1. A dictionary is an example of sequence datatype. 2. A dictionary cannot have two elements with same key. 3. A dictionary cannot have two element with same value. 4. The key and value of an element cannot be the same.
5	If L is a list of 6 elements, then which of the following statement will raise and exception? (A) L.pop(1) (B) L.pop(6) (C) L.insert(1,6) (D) L.insert(6,1)
6	True or False In Python, Logical errors can be handled using try..except..finally statement.
7	Asssertion: [1,2,3]+’123’ is an invalid expression. Reason(R): IN Python, a list cannot be concatenated with string
8	Write a Python statement to perform the following tasks: (USE BUILD_IN FUNCTIONS/METHODS ONLY) (i) To create a new list L1 containing the elements of list L arranged in ascending order, without modifying list L. (ii) A statement to check whether the given character, ch is an alphabet or a number
9	Assume that D1 is a dictionary in Python, (i) (a) write a Python statement to check if the key, ‘RNo’ is present in D1 (b) Write a Python expression to check if any key D1 has a value 12 (ii) (a) Write a single statement using BUILT_IN function to add the key:value pair ‘RNo’:12, if the key ‘RNo’ is not present in D1, However, if the key ‘RNo’ is present, the function should return its value. (b) Write a single statement to delete all the elements from D1.
10	What possible output(s) from the given options will NOT be displayed when the following code is executed? Also, mention, for how many iteration the for loop in the given code will run? import random a=[1,2,3,4,5,6]

	for i in range(4): j = random. randrange(i,5) print(a[j],end='-') print() (A) 3-4-5-4 (B) 2-2-4-5 (C) 4-3-3-5- (D) 5-1-2-4-
11	State if following statement is True or False : If **T** is a tuple and **L** is a list, then **T+L** is a valid statement in Python.

12	Identify the output of the following code segment :
	`s = "an apple. a toy."`
	`s=s.find('a',2)`
	`print(s)`
	(A) 0 (B) 1
	(C) 3 (D) 'a'

13	What is the output of the following expression ?
	`Sports="Paralympic Games"`
	`print (Sports.split("m"))`
	(A) `['Paraly','m','pic Ga','m','es']`
	(B) `('Paraly','m','pic Games')`
	(C) `('Paraly','pic Ga','es')`
	(D) `['Paraly','pic Ga','es']`

14	What will be the output of the following code segment ?
	`p=list("Session 2024-25")`
	`print(p[10:20:])`

15	Which of the following is a mapped data type ? (A) List (B) Sets (C) Dictionary (D) Boolean
16	If the dictionary D1 is defined as : `D1={1:'a',2:'b'}` then which of the following statements is ***incorrect*** and hence will result in an error ? (A) `D1.get(1)` (B) `D1.get(3)` (C) `D1.del(1)` (D) `D1.clear()`
17	Which of the following list methods accepts exactly 2 parameters ? (A) `append()` (B) `extend()` (C) `insert()` (D) `pop()`
18	State whether the following statement is True or False. In Python, the `print()` evaluates the expression before displaying it on the screen.

19	Assuming that **D1** and **D2** are Python dictionaries, write the following statements using built-in functions/methods : (I) (a) To delete all the elements of **D1**. **OR** (b) To generate a list of values of **D1**. (II) (a) To update dictionary **D2** with the elements of **D1**. **OR** (b) To generate a tuple of keys of **D2**.

20	Identify the correct possible output(s) of the following code segment. Also write the minimum and the maximum possible values of the variable b.
	`import random`
	`s="War and Peace"`
	`a=len(s)//2`
	`for i in range(4):`
	`  b=random.randrange(i,a)`
	`  print(s[b],end='+')`
	(A) `n+P+d+a+` (B) `W+r+n+n+`
	(C) `e+r+W+a+` (D) `a+P+e+r+`

21	The code provided below is intended to input a positive integer from the user and display the total number of its factors. However, there are syntax and logical errors in the code. Rewrite the code after removing all the errors. Underline all the corrections made.
	`n=int(input("Enter a positive integer:")`
	`c=0`
	`for i in range(n+1):`
	`  if n%i=0:`
	`  c+=1`
	`print(c)`

22	Write the output on execution of the following Python code :
	`P=[3,5,7,4]`
	`P.insert(2,3)`
	`P.extend([10, 6])`
	`print(P)`
	`print(P.index(7))`
	`print(P[::2])`

23	State True or False : "A Python List must always contain all its elements of same data type."

24	Identify the correct output of the following code snippet :
	`game="Olympic2024"`
	`print(game.index("C"))`
	(A) `0` (B) `6`
	(C) `-1` (D) `ValueError`

25	Consider the statements given below and then choose the correct output from the given options :
	`L=['TIC', 'TAC']`
	`print(L[::-1])`
	(A) `['CIT', 'CAT']` (B) `['TIC', 'TAC']`
	(C) `['CAT', 'CIT']` (D) `['TAC', 'TIC']`

26	Consider the statements given below and then choose the correct output from the given options :
	`D={'S01':95, 'S02':96 }`
	`for I in D :`
	`  print(I,end='#')`
	(A) `S01#S02#` (B) `95#96#`
	(C) `S01,95#S02,96#` (D) `S01#95#S02#96#`

27	Which of the following built-in function/method returns a dictionary ? (A) `dict()` (B) `keys()` (C) `values()` (D) `items()`

28

Consider the following dictionaries, D and D1 :

```
D={"Suman": 40, "Raj":55, "Raman":60}
D1={"Aditi":30, "Amit":90,"Raj":20}
```

(Answer using built-in Python functions only)

(i) (a) Write a statement to display/return the value corresponding to the key `"Raj"` in the dictionary `D`.

OR

(b) Write a statement to display the length of the dictionary `D1`.

(ii) (a) Write a statement to append all the key-value pairs of the dictionary `D` to the dictionary `D1`.

OR

(b) Write a statement to delete the item with the given key `"Amit"` from the dictionary `D1`.

29

What possible output from the given options is expected to be displayed when the following code is executed ?

```
import random
Cards=["Heart","Spade","Club","Diamond"]
for i in range(2):
    print(Cards[random.randint(1,i+2)],end="#")
```

(A) `Spade#Diamond#`

(B) `Spade#Heart#`

(C) `Diamond#Club#`

(D) `Heart#Spade#`

30

Write the output displayed on execution of the following Python code :

```
LS=["HIMALAYA", "NILGIRI", "ALASKA", "ALPS"]
D={}
for S in LS :
    if len(S)%4 == 0:
        D[S] = len(S)
for K in D :
    print(K,D[K], sep = "#")
```

PROGRAM TO WRITE IN PRACTICAL COPY

1	WAP to enter any number and check it is Prime Number or not
2	WAP to enter any number and check number is perfect number, an Armstrong number or palindrome number
3	WAP to enter any string and count how many Alphabets, Digits, Symbols, Uppercase letter, Lower case letter, vowels present in the string
4	WAP to enter two numbers and find GCD and LCM
5	WAP to enter 10 numbers in list and find the highest values, lowest value present in the list • Use of sort() function not allowed