



Date:12/06/23 GRADE: XII	MONTHLY TEST-1 (2024-25) INFORMATICS PRACTICES 065	Max marks:20 Time: 50 min.
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General Instructions:

All questions are compulsory.

Qn. No	SECTION A	Marks allocated
1	Predict the output: <code>L=['a','b','c','d']</code> <code>L[0:2]=['x','y']</code> <code>print(L)</code> (a) 'a', 'b', 'c', 'd' (b) 'x', 'y', 'c', 'd' (c) Error (d) No Output	1
2	Create a dictionary named Dic2 by using list as values. The two keys are Name and Marks. The values of both keys are Riya, Priya, Maya, Seetha and 67,89,90,45.	1
3	Assertion: Python lists are mutable, whereas strings are immutable. Reasoning: In Python, mutable objects can be modified after creation, while immutable objects cannot. Lists allow for the modification of elements, such as adding, removing, or changing values, whereas strings do not support such operations. (a) True. Lists in Python are mutable (b) False. Lists in Python are immutable	1
4	The size of the object of Series is _____	1
5	In a DataFrame, Axis=1 represents the _____ elements	1
	SECTION B	
6	What is Data Visualization. Name any two charts and the library used for the same.	2
7	Consider the code given below and answer the questions <code>import pandas as pd</code> <code>Ld=[{'a':5,'b':10},{'a':15,'b':20,'c':30}]</code> <code>df=pd.DataFrame(Ld)</code> <code>print(df)</code> (a) How many rows will be there in the above DataFrame df? (b) How many columns will be there in the above DataFrame df? (c) How many NaN will be there in the above DataFrame? (d) How many dictionaries are used in the above code?	2
8	What is CSV? Give one advantage and one disadvantage.	2
9	Predict the output: (a) <code>import pandas as pd</code> <code>lst=[56,78,45,12,89]</code> <code>print(lst)</code>	2

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(b)
import pandas as pd
lst=[56,78,45,12,89]
print(lst[1])
(c)
import pandas as pd
lst=[56,78,45,12,89]
print(lst[1:3])
(d)
import pandas as p
lst=[56,78,45,12,89]
S1=p.Series(lst)
print(S1)

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SECTION C

10 Create a DataFrame based on the data given below: Can use list/dictionary.

3

	NAME	ENG	SCI	SST	MAT
XI	Ashna	45	44	41	40
XII	Thomas	35	32	31	37
X	Varma	28	49	39	50
IX	Xavior	22	28	33	38

Ensure that the DataFrame with user given index and column headings

SECTION D

11 Consider the month-wise production of objects in XYZ Company. Consider the number of units in lakhs. Plot a BAR chart for the same using PyPlot module with necessary labels and titles given in the figure.

4

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Month=['Jan','Feb','Mar','Apr','May','Jun']
Units=[12,11,10,15,18,13]

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