KENDRIYA VIDYALAYA, IIT POWAI **Class XII (Informatics Practices) Monthly Test AUGUST 2019**

1. Give the difference between Numpy array and Python List 2. Find the output: import numpy as np a1=np.array([[1,2,3],[4,5,6],[7,8,9]]) a2=np.array([[11,12,13],[14,15,16]]) (i) a3=np.concatenate((a1,a2),axis=0) print(a3) (ii) a3=np.concatenate((a1,a2),axis=1) print(a3) (iii) a3=np.concatenate((a1,a2),axis=None) print(a3) 3. Write a program to perform addition and subtraction of two different 2D Arrays. 2 4. Give the output: 2 A = np.array([[1, 3], [2, 6], [5, 8]]) (i) print(A[1,1]) (ii) print(A[1,1]) (iii) print(A[1:][1]) (iv) print(A[1][1:]) 5. Identify error(s) and write correct the code: 1 import numpy as np A = np.arrage([12]) B=A.reshape(A,4) print(B) 6. Write Panda code to create empty Series. 1 7. Give output of following code: Import pandas as pd P=pd.Series(range(1,40,5),index=[x for x in "classxii"]) print(P) print(P) print(P,nidex) y print(P,nidex) Y	ne : 1	.½ hrs.			mility rest Acc		MM : 20
a2=np.array([[11,12,13],[14,15,16]]) (i) a3=np.concatenate((a1,a2),axis=0)	2. I	Find the output:					
(i) a3=np.concatenate((a1,a2),axis=0)							
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4. Give the output:	((iii)	· ·	enate((a1,a2),axiss=None)		
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(ii) print(A[1,1]) (iii) print(A[1][1]) (iiii) print(A[1:1]1) (iv) print(A[1][1:1)) 5. Identify error(s) and write correct the code :	4. (Give the output :					
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0 Kiran CS 58 C 1 Suman Phy 65 B 2 Pinku Chem 85 A 3 Kamla CS 80 A	9. \	Write python code to create DataFrame as follows :					3
1 Suman Phy 65 B 2 Pinku Chem 85 A 3 Kamla CS 80 A			Name	Subject	Marks	Grade	
2 Pinku Chem 85 A 3 Kamla CS 80 A	(0	Kiran	CS	58	С	
3 Kamla CS 80 A	1	1	Suman	Phy	65	В	
	2	2	Pinku	Chem	85	Α	
10. Write code to display above Dataframe (Q.9) sorted by Marks.	3	3	Kamla	CS	80	Α	
	10.	Write	code to displa	y above Data	frame (Q.9) sor	ted by Marks.	1

11. Write code to create pivot Table with "Name" as index and "Subject" as columns of Dataframe 2

of Q.9.
