

Indian School Al Wadi Al Kabir

Department of Computer Science

Class: XII

Sub: Informatics Practices

Duration: 45 Mins

Max: 20

Sample Paper – Data Frame

- 1) Create the following data frame **StudDF** to denote the 3 subject marks scored by 5 students by using Dictionary of Series Method. (2)

	Harry	Kiran	Anuj	Karan	Rohit
Science	85	82	65	60	90
Maths	90	95	85	80	75
English	80	85	75	70	60

- 2) Create the following data frame **EmpDF** to represent the salaries of 5 employees in 4 years by using Dictionary of List Method: (2)

	2017	2018	2019	2020
Madhu	10050	12000	20000	50000
Kevin	15080	18000	50000	60000
Simran	20090	22000	70000	70000
Ankit	30000	30000	10000	80000
Shruti	40000	45000	125000	90000

- 3) Create the following data frame **SalesDF** which provides the details about sales performance of 5 salesman in 4 different zones using Nested List Method. (2)

	0	1	2	3	4
0 Akhil	15000	18000	14000	25000	
1 Riyan	12500	16000	13000	23000	
2 Zen	16500	19000	17500	32000	
3 Shreya	14000	17200	16000	27300	
4 Taniya	13400	15200	15000	26000	

- 4) _____ command helps to fetch index names. (1)
- 5) _____ command helps to fetch column names (1)
- 6) _____ command helps to fetch the data type values of the items in data frame. (1)
- 7) StudDF. _____ statement gives the output **15**. (1)
- 8) StudDF. _____ statement gives the output **(3,5)** (1)
- 9) EmpDF. _____ statement gives the output **2**. (1)
- 10) _____ statement helps to transpose the data frame SalesDF. (1)
- 11) Which property of dataframe is used to check that dataframe **StockDF** is empty or not? (1)
- 12) Consider the following data frame **sportsdf** and perform the operations given below: (6)

	Name	Age	Score
P1	Alisa	26	89
P2	Bobby	27	87
P3	Cathrine	25	67
P4	Madonna	24	55
P5	Rocky	31	47
P6	Sebastian	27	72
P7	Jaquiline	25	76

- i) Display first 3 rows and last 2 rows.
- ii) Extract all the values of Row Index **P4**.
- iii) Extract all the values under **Name** column.
- iv) Extract all the values under Age column from row indices **P4** to **P6**.
- v) Extract all the value under Score column for row indices **P2**, **P3**, **P5**.
- vi) Extract all the values under Name and Score column for row indices from **P3** to **P6**.

All the Best