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MONTHLY TEST APRIL

TIME: 40 MIN

MM:25

Q.1 Suppose a data frame contains information about student having columns rollno, name, class and section. 4

Write the code for the following:

- (i) Add one more column as fee and city.
- (ii) Write syntax to transpose data frame.
- (iii) Write python code to delete column fee of data frame.
- (iv) Write the code to append df2 with df1

Q.2 Assume following data is stored in data frame named as df1 5

Write following commands:

- (i) Find total sales per state
- (ii) find total sales per employee
- (iii) find total sales both employee wise and state wise
- (iv) find mean, median and min sale state wise
- (v) find maximum sale by individual

Name of Employee	Sales	Quarter	State
RSahay	125600	1	Delhi
George	235600	1	Tamil Naidu
JayaPriya	213400	1	Kerala
ManilaSahai	189000	1	Haryana
RymaSen	456000	1	West Bengal
ManilaSahai	172000	2	Haryana
JayaPriya	201400	2	Kerala

Q.3 State the difference between sort_index() and sort_values() methods. 2

Q.4 (a) a = pd.DataFrame([1, 1, 1, np.nan], index=['a', 'b', 'c', 'd'], columns=['one']). What is O/P? 2

(b)

```
import pandas as pd
data = [1,2,3,4,5]
df = pd.DataFrame(data)
print (df)
What will Print in Output ?
```

Q.5 Differentiate between series data structure and data frame data structure? 2

Q.6 Write Output ? 2

```
import pandas as pd
data = [{'a': 1, 'b': 2},{'a': 5, 'b': 10, 'c': 20}]
#With two column indices, values same as dictionary keys
df1 = pd.DataFrame(data, index=['first', 'second'], columns=['a', 'b'])
#With two column indices with one index with other name
df2 = pd.DataFrame(data, index=['first', 'second'], columns=['a','b1'])
print(df1)
print(df2)
```

Q. 7 (a) What is Python pandas? 1

b) What are differences between reindex() and rename()? 2

c) What is the use of pipe() in python pandas? 2
