

CBSE Class 12th - Data handling using Pandas MCQ

Most Important Questions

[1] Which of the following statement will install pandas library in python?

- a) Pip install pand as pd
- b) pip install pandas as pd
- c) pip install pandas.pd
- d) pip install pandas

Ans.: d) pip install pandas

Explanation: The pip command follows this syntax:

pip install module_name

Hence here pandas is module name. So the correct option is d

[2] Given a Pandas series called HEAD, the command that will display the first 3 rows is ____.

- a) print(HEAD.head(3))
- b) print(HEAD.Heads(3))
- c) print(HEAD.heads(3))
- d) print(head.HEAD(3))

Ans.: a) print(HEAD.head(3))

Explanation: The HEAD is dataframe name and head() is function that is used to display top n rows from the dataframe. So according to this option a is correct answer. Rest all are incorrect.

[3] We can create dataframe from:

- a) Series
- b) Numpy arrays
- c) List of Dictionaries
- d) All of the above

Ans. d) All of these

Explanation: you can create a dataframe using any sequence or collection in python. All the given options are collections of python.

[4] To create an empty Series object, you can use:

- a) `pd.Series(empty)`
- b) `pd.Series()`
- c) `pd.Series(np.NaN)`
- d) `pd.Series(None)`

Ans.: b) `pd.Series()`

Explanation: While creating an empty series in python, `Series()` function without any parameter is used.

[5] Assertion (A):- While creating a dataframe with a nested or 2D dictionary, Python interprets the outer dict keys as the columns and the inner keys as the row indices.

Reasoning (R):- A column can be deleted using the remove command.

Ans.: c) A is true but R is False

Explanation: To delete a column `drop()` or `del` can be used.

[6] Assertion (A): DataFrame has both a row and column index.

Reasoning (R): .loc() is a label-based data selecting method to select a specific row(s) or column(s) that we want to select.

Ans.: a) Both A and R are True and R is correct explanation of A

[7] Assertion (A) : Pandas is an open-source Python library that offers high-performance, easy-to-use data structures and data analysis tools.

Reason (R) : Professionals and developers are using the pandas library in data science and machine learning.

Ans.: a) Both A and R are True and R is correct explanation of A

[8] Assertion (A): – When DataFrame is created by using Dictionary, keys of dictionary are set as columns of DataFrame.

Reasoning (R):- Boolean Indexing helps us to select the data from the DataFrames using a boolean vector.

Ans.: b) Both A and R are true but R is not correct explanation of A

[9] To display First 15 rows of a series object 'Ser1', you may write:

- a) Ser1.tail(15)
- b) Ser1.head()
- c) Ser1.head(15)
- d) Ser1.tail()

Ans.: c) Ser1.head(15)

[10] Given a Pandas series called p_series, the command which will display the last 4 rows is _____

- a) print (p_series.Tail(4))
- b) print (p_series.Tails(4))
- c) print (p_series.tail(4))
- d) print (p_series.Tails(4))

Ans.: c) print(p_series.tail(4))

[11] In Pandas which of the following dataframe attribute can be used to know the number of rows and columns in a dataframe?

- a) size
- b) index
- c) count
- d) shape

Ans.: d) shape

Explanation: The size attribute returns product of rows and columns, index property will return index, count function used to count the frequency of particular item in dataframe.

[12] Consider the below-given series, named Batsman, which command will be used to print 6 as output?

a	WD Parnell
b	David Warner

c	RG Sharma
d	KL Rahul
e	Baber Azam
f	Ross Taylor

dtype: object

- a) Batsman .index
- b) Batsman .length
- c) Batsman .values
- d) Batsman .size

Ans.: d) Batsman.size

[13] When a DataFrame is created from List of Dictionaries, then dictionary keys will become _____

- a) Column labels
- b) Row labels
- c) Both of the above
- d) None of the above

Ans.: a) Column labels

Explanation: The dictionary keys are placed as column labels in the dataframe.

[14] Assertion (A):- DataFrame has both a row and column index.

Reasoning (R): – A DataFrame is a two-dimensional labeled data structure like a table of MySQL.

Ans.: a) Both A and R are true and R is correct explanation of A

[15] Consider the following code and identify the error:

```
import pandas as pd
s=pd.Series([1,9,6,4],index=['a','b','c'])
```

```
print(s)
```

a) ValueError

b) TypeError

c) IndexError

d) SyntaxError

Ans.: a) ValueError