

QN0	SECTION-B											
22	(A)	What is a Series in Python Pandas? Also, give a suitable example to support your answer. A Series is a one-dimensional array containing a sequence of values of any data type (int, float, list, string, etc) which by default have numeric data labels starting from zero. We can imagine a Pandas Series as a column in a spreadsheet. An example of a series containing the names of students is given below: <table><tr><th>Index</th><th>Value</th></tr><tr><td>0</td><td>Arnab</td></tr><tr><td>1</td><td>Samridhi</td></tr><tr><td>2</td><td>Ramit</td></tr><tr><td>3</td><td>Divyam</td></tr></table>	Index	Value	0	Arnab	1	Samridhi	2	Ramit	3	Divyam
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	(B)	OR What does the term 'library' signify in Python? Mention one use for each of the following libraries: • Pandas • Matplotlib Library: A collection of modules providing functionalities for specific tasks. Pandas: Used for data analysis Matplotlib: Used for creating plots										
23	What are intellectual property rights (IPR), and why are they important in the digital world? Intellectual Property Rights (IPR) These are legal rights that protect the creations of the human intellect. The nature of these works can be artistic, literary or technical etc. Importance in the digital world These rights help prevent the unauthorized use or reproduction of digital content and ensure that creators are fairly compensated and incentive for their original work.											

24		Consider the string: "Database Management System". Write suitable SQL queries for the following: - To extract and display "Manage" from the string. - Display the position of the first occurrence of "base" in the given string. I SELECT SUBSTRING('Database Management System', 10, 6); II SELECT INSTR('Database Management System', 'base');
25	(A)	What is Internet and how does it differ from World Wide Web (WWW)? The Internet is a vast network of interconnected computer networks facilitating global communication and data exchange. The World Wide Web (WWW), on the other hand, is a system of interlinked hypertext documents accessed via the Internet. OR Explain the concept of browser cookies and mention one advantage of using them. Browser cookies: Small pieces of data stored on our digital devices by websites to remember information and personalize our experience. Advantage: Improve user experience by remembering preferences, like our preferred language and other settings.
26		Define the term Primary Key in a database. Explain how it is different from a Candidate Key. Primary Key : A set of attributes that can uniquely identify each row in a table (relation). It must contain unique values and cannot be null. How it differs from Candidate Key There can be multiple Candidate Keys in a table (relation), but only one of them is selected as Primary Key.
27		Mention two health concerns associated with excessive use of Digital Devices. Two health concerns due to excessive use of Digital Devices: a) Eye strain and vision problems. b) Musculoskeletal issues like neck and back pain.
28	(A)	Sneha is writing a Python program to create a DataFrame using a list of dictionaries. However, her code contains some mistakes. Identify the errors, rewrite the correct code, and underline the corrections made. <pre>import Pandas as pd D1 = {'Name': 'Rakshit', 'Age': 25} D2 = {'Name': 'Paul', 'Age': 30}</pre>

```
D3 = {'Name': 'Ayesha", 'Age': 28} data
= [D1,D2,D3)
df = pd.Dataframe(data)
print(df)
```

(B)

```
import pandas as pd
D1 = {'Name': 'Rakshit', 'Age': 25}
D2 = {'Name': 'Paul', 'Age': 30}
D3 = {'Name': 'Ayesha', 'Age': 28}
data = [D1, D2, D3]
df = pd.DataFrame(data)
print(df)
```

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Changes Made :

- i Changed Pandas to pandas.
- ii Corrected mismatched string quotation marks
- iii Corrected the closing parenthesis in the list data.
- iv Changed Dataframe to DataFrame.

OR

Complete the given Python code to get the required output (ignore the dtype attribute) as

Output:

Tamil Nadu	Chennai Uttar
Pradesh	Lucknow
Manipur	Imphal

Code:

```
import _____ as pd
data = ['Chennai', '_____', 'Imphal']
indx = ['Tamil Nadu', 'Uttar Pradesh', 'Manipur'] s =
pd.Series(_____, indx)
print(_____)
```

```
import pandas as pd
data = ['Chennai', 'Lucknow', 'Imphal']
indx = ['Tamil Nadu', 'Uttar Pradesh', 'Manipur']
s = pd.Series(data, indx)
print(s)
```

