

Q No.	Section-A (21 x 1 = 21 Marks)	Marks
1	State whether the following statement is True or False: Slicing can be used to extract a specific portion from a Pandas Series. True	1
2	The purpose of WHERE clause in a SQL statement is to: (A) Create a table (B) Filter rows based on a specific condition (C) Specify the columns to be displayed (D) Sort the result based on a column	1
3	Identify the networking device responsible for routing data packets based on their destination addresses. (A) Modem (B) Hub (C) Repeater (D) Router	1
4	Identify the SQL command used to delete a relation (table) from a relational database. (A) DROP TABLE (B) REMOVE TABLE (C) DELETE TABLE (D) ERASE TABLE	1
5	e-waste refers to: (A) Software that has become obsolete (B) Data that has been deleted from a storage device (C) Viruses that infect computers (D) Electronic devices that are no longer in use	1
6	Which of the following Python statements can be used to select a column column_name from a DataFrame df ? (A) df.getcolumn('column_name') (B) df['column_name'] (C) df.select('column_name') (D) df(column_name)	1

7	By default, the plot() function of Matplotlib draws a_____plot. (A) histogram (B) column (C) bar (D) line	1
8	State whether the following statement is True or False: In SQL, the HAVING clause is used to apply filter on groups formed by the GROUP BY clause. True	1
9	Which of the following Python statements is used to import data from a CSV file into a Pandas DataFrame (Note: pd is an alias for pandas)? (A) pd.open_csv('filename.csv') (B) pd.read_csv('filename.csv') (C) pd.load_csv('filename.csv') (D) pd.import_csv('filename.csv')	1
10	What is plagiarism? (A) Using copyrighted material without giving proper acknowledgement to the source (B) Downloading illegal software. (C) Spreading misinformation online. (D) Hacking into computer systems.	1
11	Fill in the Blank The COUNT (*) function provides the total number of_____within a relation (table) in a relational database. (A) Columns (B) Unique values (C) Not-null values (D) Rows	
12	In which of the network topologies do all devices connect to a central point, such as a switch or hub? (A) Star (B) Bus (C) Tree (D) Mesh	

13	In a Pandas DataFrame, if the <code>tail()</code> function is used without specifying the optional argument indicating the number of rows to display, what is the default number of rows displayed, considering the DataFrame has 10 entries? (A) 0 (B) 1 (C) 4 (D) 5	
14	Identify the type of cybercrime that involves sending fraudulent emails to deceive individuals into revealing sensitive information. (A) Hacking (B) Phishing (C) Cyberbullying (D) Cyberstalking	
15	While creating a Series using a dictionary, the keys of the dictionary become: (A) Values of the Series (B) Indices of the Series (C) Data type of the Series (D) Name of the Series	
17	Fill in the Blank Boolean indexing in Pandas DataFrame can be used for_____. (A) Creating a new DataFrame (B) Sorting data based on index labels (C) Joining data using labels (D) Filtering data based on condition	
18	Which Matplotlib plot is best suited to represent changes in data over time? (A) Bar plot (B) Histogram (C) Line plot (D) Histogram & Bar plot The most typical visual representation of time series data is a line plot where time is put on the x-axis and the measured value – on the y-axis.	
19	Which type of network covers a small geographical area like a single office, building, or school campus? PAN MAN LAN WAN	

	Q-20 and Q-21 are Assertion (A) and Reason (R) Type questions. Choose the correct option as:	
	(A) Both Assertion (A) and Reason (R) are true, and Reason (R) is the correct explanation of Assertion (A) (B) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of Assertion (A) (C) Assertion (A) is True, but Reason (R) is False (D) Assertion (A) is False, but Reason (R) is True	
20	Assertion (A): We can add a new column in an existing DataFrame. Reason (R): DataFrames are size mutable. A	1
21	Assertion (A): In SQL, <code>INSERT INTO</code> is a Data Definition Language (DDL) Command. Reason (R): DDL commands are used to create, modify, or remove database structures, such as tables. D	1