



Question Paper

Conducted by National Testing Agency (NTA)

General Instructions

- (i) The examination will be conducted in Computer-Based Test (CBT) mode.
- (ii) Each question carries +5 marks for correct answer and -1 mark for wrong answer.
- (iii) The total number of questions are 50.
- (iv) Duration of the exam is 1 hour (60 minutes).

Section A : Common

1. In a relation, if more than one attribute can have distinct values, such attributes are called _____.

- (A) Primary Key
- (B) Candidate Key
- (C) Foreign Key
- (D) Composite Key

2. Which of the following statement will correctly filter products having an average price of 50?

- (A) `SELECT Category FROM Products GROUP BY Category HAVING AVG(Price) > 50;`
- (B) `SELECT Category FROM Products GROUP BY WHERE AVG(Price) > 50;`
- (C) `SELECT Category FROM Products HAVING AVG(Price) > 50;`
- (D) `SELECT Category FROM Products GROUP BY AVG(Price) > 50;`

3. Each MAC address is a _____.

- (A) 8-digit hexadecimal number
- (B) 36-digit hexadecimal number
- (C) 24-digit hexadecimal number
- (D) 12-digit hexadecimal number

4. Arrange the following SQL clause in the correct order of writing a query:

- A. DISTINCT
- B. ORDER BY
- C. WHERE
- D. SELECT

Choose the correct answer from the options given below:

- (A) D, A, C, B
- (B) A, B, C, D
- (C) B, A, D, C
- (D) D, B, A, C

5. Which SQL Query below is correct for deleting all records from 'Products' table having product names starting with 'M'?

- (A) DELETE FROM Products WHERE ProductName LIKE 'M%';
- (B) REMOVE FROM Products WHERE ProductName LIKE 'M%';
- (C) DROP FROM Products WHERE ProductName IS 'M%';
- (D) REMOVE FROM Products WHERE ProductName IS 'M%';

6. In a table regarding the entries of students, which among these can be the most appropriate for PRIMARY KEY?

- (A) RollNumber
 - (B) Name
 - (C) DateofBirth
 - (D) Age
-

7. What is the number of connections in the mesh topology having 5 devices?

- (A) 10
 - (B) 12
 - (C) 20
 - (D) 5
-

8. What is hub used for in a network?

- (A) Filtering Data
 - (B) Unicasting Data
 - (C) Multicasting Data
 - (D) Broadcasting Data
-

9. Which of the following SQL query will filter products having cost more than 500?

- (A) SELECT ProductName FROM PRODUCTS WHERE Cost>500;
 - (B) SELECT ProductName FROM PRODUCTS GROUP BY Cost>500;
 - (C) SELECT ProductName FROM PRODUCTS HAVING Cost>500;
 - (D) SELECT DISTINCT ProductName FROM PRODUCTS HAVING Cost>500;
-

10. Which of the following are to be considered while applying JOIN operations on two or more relations?

- A. If two tables are to be joined on equality condition on the common attribute, then one may use JOIN with ON clause or NATURAL JOIN in FROM clause.
- B. If three tables are to be joined on equality condition, then two JOIN or NATURAL JOIN are required.
- C. N-1 joins are needed to combine N tables on equality condition.
- D. With JOIN clause, we may use any relational operators to combine tuples of two tables.

Choose the correct answer from the options given below:

- (A) A, B and D only
 - (B) A, B and C only
 - (C) A, B, C and D
 - (D) B, C and D only
-

11. The HAVING clause is used to filter groups based on which function results?

- (A) Mathematical
 - (B) Aggregate
 - (C) Window
 - (D) Recursive
-

12. Match the LIST-I with LIST-II

LIST-I (Network Topology)	LIST-II (Characteristics)
A. Star	I. Data sent from a node can be transmitted in both directions
B. Ring	II. Any failure in a central networking device may lead to the failure of complete network
C. Bus	III. Data can be transmitted in one direction only
D. Mesh	IV. If a node gets down, it does not cause any break in the transmission of data between other nodes

Choose the correct answer from the options given below:

- (A) A-I, B-II, C-III, D-IV

- (B) A-II, B-III, C-I, D-IV
(C) A-II, B-IV, C-I, D-III
(D) A-II, B-III, C-I, D-IV
-

13. Match the LIST-I with LIST-II

LIST-I (Network Devices)	LIST-II (Description)
A. Modem	I. A network adapter used for a wired network
B. Ethernet	II. A device used to connect multiple computers or communicating devices
C. Router	III. A device for conversion of analog to digital signals
D. Switch	IV. A network device that can receive, analyze and transmit data

Choose the correct answer from the options given below:

- (A) A-I, B-II, C-III, D-IV
(B) A-III, B-I, C-IV, D-II
(C) A-I, B-III, C-IV, D-II
(D) A-III, B-IV, C-I, D-II
-

14. What will be the degree of the table 'Book' with 200 rows having attributes as BookID, author, price and year?

- (A) 200
(B) 1
(C) 4
(D) 3
-

15. Which of the following are Data Definition Language statements?

- A. CREATE
B. INSERT
C. ALTER
D. DROP

Choose the correct answer from the options given below:

- (A) A, B and D only
 - (B) A, C and D only
 - (C) A, B, C and D
 - (D) B, C and D only
-

16. Match the LIST-I with LIST-II

LIST-I (Operations on Relations)	LIST-II (Description)
A. SELECT	I. to retrieve data from the tables
B. INTERSECT	II. to get the common tuples from two tables
C. JOIN	III. to combine tuples from two tables on specified conditions
D. UNION	IV. to combine the selected rows of two tables at a time

Choose the correct answer from the options given below:

- (A) A-I, B-II, C-III, D-IV
 - (B) A-II, B-I, C-III, D-IV
 - (C) A-II, B-I, C-IV, D-III
 - (D) A-IV, B-II, C-I, D-III
-

17. In a stack of Size 'N', if there are 'M' elements inserted into the stack and then 'M/2' are popped out. What is the remaining number of elements left in the stack? Assume 'M' < 'N'.

- (A) $N - M/2$
 - (B) $M/2$
 - (C) $N/2$
 - (D) 1
-

18. How do you move the file pointer to the 10th byte from the beginning of a file in Python?

- (A) `file.seek(10, 0)`
- (B) `file.seek(0, 10)`

- (C) file.move(10, 0)
 - (D) file.seek(10)
-

19. What will be the sequence of the given SQL clauses to display the Customer Id (CustID) and number of cars purchased if the customer purchased more than 1 car from SALE table?

- A. GROUP BY CustID**
- B. COUNT(*)**
- C. HAVING COUNT (*) > 1**
- D. FROM SALE**
- E. SELECT CustID**

Choose the correct answer from the options given below:

- (A) E, A, B, C, D
 - (B) E, A, B, D, C
 - (C) E, B, A, D, C
 - (D) E, B, D, A, C
-

20. Which of the following statements are correct with respect to handling exceptions in Python?

- A. The try block is used to catch exceptions.**
- B. The except block is executed if an exception occurs.**
- C. You can have multiple except blocks.**
- D. The else block executes if no exceptions occur.**

Choose the correct answer from the options given below:

- (A) A, B and D only
 - (B) A, C and D only
 - (C) A, B, C and D
 - (D) B, C and D only
-

21. Which of the following function can be used to insert a new element at the end of a queue? (Assume a queue named myQueue has been created by assigning an empty list i.e., myQueue = list())

1.

```
def enqueue(myQueue, element):  
    myQueue.add(element)
```
2.

```
def enqueue(myQueue, element):  
    myQueue.append(element)
```
3.

```
def enqueue(myQueue, element):  
    myQueue.push(element)
```
4.

```
def enqueue(myQueue, element):  
    myQueue.insert(element)
```

- (A) 1
 - (B) 2
 - (C) 3
 - (D) 4
-

22. The worst case time complexity of finding an element using linear search is _____.

- (A) $O(\log n)$
 - (B) $O(n)$
 - (C) $O(n^2)$
 - (D) $O(n \log n)$
-

23. A stack follows _____ principle.

- (A) FIFO
- (B) LIFO
- (C) Enqueue-Dequeue
- (D) LILO

24. If a list is having 'n' elements, then how many passes 'Selection Sort' will require to sort the list?

- (A) 1
- (B) $n - 1$
- (C) n
- (D) 0

25. If every item of the list maps to a unique index in the hash table, the hash function is called a _____ hash function.

- (A) perfect
- (B) remainder
- (C) collision
- (D) aggregate

26. If there is a nested loop and also a single loop, then the time complexity will be estimated on the basis of the _____ loop only.

- (A) nested
- (B) single
- (C) first
- (D) second

27. Identify the technique in which a new application is executed in a virtual environment and its behavioral fingerprint is observed for a possible malware.

- (A) Data Mining Techniques
 - (B) Heuristics
 - (C) Sandbox Detection
 - (D) Signature Based Detection
-

28. If a data has outliers, then which measure of central tendency is preferred for finding central value?

- (A) Mean
 - (B) Median
 - (C) Mode
 - (D) Hash
-

29. Insertion sort will have a time complexity of _____ in the worst case.

- (A) n^3
 - (B) $\log(n)$
 - (C) n
 - (D) n^2
-

30. The elements A, B, C, D, E are to be entered in an empty queue starting from A. The following operations are performed:

Enqueue(), Enqueue(), Enqueue(), Dequeue(), Dequeue(), Enqueue(), Dequeue()

What will be the status of the queue after the above operation?

- (A) C and D
- (B) D and E
- (C) B and C
- (D) C, D and E

31. Which of the following devices uses IP address as means of communication?

- A. Hub
- B. Gateway
- C. Router
- D. Repeater

Choose the correct answer from the options given below:

- (A) A and D only
- (B) B and C only
- (C) B, C and D only
- (D) A, B, C and D

32. Give output of the evaluation of the following postfix expression:

10 2 8 * + 3 -

- (A) 23
- (B) 97
- (C) 25
- (D) 47

33. _____ is used to insert a new element to the queue at the _____ end.

- (A) DEQUEUE ; front
- (B) ENQUEUE ; front
- (C) DEQUEUE ; rear
- (D) ENQUEUE ; rear

34. In a dataset of cars, a column 'colour' has missing values. The dataset has to be free of any missing values. Which measure of central tendency we should use to fill the data?

- (A) Mean
 - (B) Median
 - (C) Mode
 - (D) Count
-

35. Can a single try block have multiple except clauses in Python?

- (A) Yes, to catch different types of exceptions
 - (B) No, only one exception type is allowed per block
 - (C) Yes, but only if they are nested
 - (D) No, exceptions must be handled separately
-

36. To upload a text document at the rate of 5 pages per 10 seconds. What will be the required data rate of the channel, assuming 1 page contain 1000 characters and each character is of 8 bits.

- (A) 4000 bps
 - (B) 6250 bps
 - (C) 8000 bps
 - (D) 5000 bps
-

37. Match the LIST-I with LIST-II

LIST-I (Transmission Waves)	LIST-II (Frequency Range)
A. Light waves	I. 3 KHz - 1 GHz
B. Infrared waves	II. 300 GHz - 400 THz
C. Radio waves	III. 1 GHz - 300 GHz
D. Microwaves	IV. 400 THz - 900 THz

Choose the correct answer from the options given below:

- (A) A-IV, B-II, C-III, D-I
 - (B) A-I, B-IV, C-II, D-III
 - (C) A-IV, B-II, C-I, D-III
 - (D) A-III, B-IV, C-I, D-II
-

38. Match the LIST-I with LIST-II

LIST-I (Malware)	LIST-II (Description)
A. Worms	I. It tracks internet usage data and sells them to advertisers
B. Virus	II. It does not need a host program or software to insert its code
C. Adware	III. It infects other computer systems that it comes into contact with by copying or inserting its code
D. Spyware	IV. It generates revenue by using pay per click

Choose the correct answer from the options given below:

- (A) A-III, B-II, C-IV, D-I
 - (B) A-II, B-III, C-IV, D-I
 - (C) A-II, B-III, C-I, D-IV
 - (D) A-III, B-IV, C-I, D-II
-

39. Assume a list = [2, 4, 6, 8, 10, 12, 14]

How many comparisons are required to find element '4' in the list using Binary search?

- (A) 3
 - (B) 4
 - (C) 2
 - (D) 1
-

40. After two complete passes of Bubble Sort on the array [7, 2, 9, 4], what will the new order be?

- A. 7
- B. 2

C. 4

D. 9

Choose the correct answer from the options given below:

(A) B, C, A, D

(B) A, B, C, D

(C) B, A, D, C

(D) B, A, C, D

41. The columns of a relation represents _____.

(A) Tuple

(B) Schema

(C) Attribute

(D) Domain

42. All the packets coming from outside the network are filtered at which of the following device?

(A) Switch

(B) Gateway

(C) Hub

(D) Router

43. Consider the runs scored by Virat Kohli in IPL 2025 as 90, 102, 115, 85, 90, 100, 110, 110 in the 9 matches. Find the standard deviation of the score.

(A) 10.2

(B) 104.22

(C) 101.33

(D) 102

44. What is the worst-case scenario for a linear search in an array of 'n' elements?

- (A) The target element is the last element
 - (B) The target element is the first element
 - (C) The array is sorted
 - (D) The array is unsorted
-

45. Assume that in a relation, more than one attributes are eligible to be primary keys. Since there can only be 1 primary key, so what we will call the other key(s)?

- (A) Foreign key
 - (B) Candidate key
 - (C) Composite key
 - (D) Super key
-

46. Arrange the following in correct order:

- A. `listvalues = ['abc', 'Gen', 1, 2.4]`
- B. `pickle.load(fileobject)`
- C. `fileobject = open("file.dat", "wb")`
- D. `pickle.dump(listvalues, fileobject)`

Choose the correct answer from the options given below:

- (A) A, B, C, D
 - (B) B, A, C, D
 - (C) D, C, B, A
 - (D) A, C, D, B
-

47. Which of the following are applications of stack?

- A. Print commands from multiple files from the same computer
- B. Bangles worn on wrist
- C. Multiple chairs in a vertical pile
- D. Pile of clothes in an almirah

Choose the correct answer from the options given below:

- (A) A, B and D only
 - (B) A, C and D only
 - (C) A, B, C and D
 - (D) B, C and D only
-

48. Which of the following attacks are associated with network intrusion?

- A. Traffic flooding
- B. Asymmetric routing
- C. Trojan-based attacks
- D. Buffer overflow attacks

Choose the correct answer from the options given below:

- (A) A, B and C only
 - (B) A, B and D only
 - (C) A, B, C and D
 - (D) B, C and D only
-

49. Which of the following protocol is used for transferring files from one machine to another even though both systems have different directory structures?

- (A) HTTP
- (B) PPP
- (C) TCP/IP
- (D) FTP

50. The elements to be inserted in the Deque are 10, 20, 30, 40, 50, 60, starting from 10. What will be the sequence of elements after the following operations are performed on a Deque:

INSERTFRONT(), INSERTREAR(), INSERTFRONT(), DELETEREAR(), DELETEFRONT(), INSERTFRONT(), INSERTREAR(), INSERTFRONT()

- A. 10
- B. 40
- C. 50
- D. 60

Choose the correct answer from the options given below:

- (A) D, B, A, C
- (B) B, D, A, C
- (C) B, A, C, D
- (D) D, C, A, B

Section B : Informatics Practics

51. Which attribute is added to display whisker in horizontal direction in the boxplot?

- (A) vert=True
- (B) vert="H"
- (C) vert=False
- (D) vert=1

52. Pandas provide a function _____ to check whether any value is missing or not in the DataFrame.

- (A) isnull()
 - (B) isnan()
 - (C) isna()
 - (D) ismissing()
-

53. Match the LIST-I with LIST-II

LIST-I (Internet Applications)	LIST-II (Description)
A. HTTP	I. It is a set of rules which is used to retrieve linked web pages across the web.
B. URL	II. It provides the location and mechanism to access the resource.
C. HTML	III. It is a language which is used to design standardised Web Pages.
D. VoIP	IV. It is a broadband telephony.

- (A) A-II, B-I, C-III, D-IV
 - (B) A-I, B-II, C-III, D-IV
 - (C) A-I, B-II, C-IV, D-III
 - (D) A-III, B-IV, C-I, D-II
-

54. Match the LIST-I with LIST-II

LIST-I (Creative Commons License Symbolic Name)	LIST-II (Description)
A. CC BY-SA	I. This license lets others reuse the work for any purpose, including commercially; however, it cannot be shared with others in adapted form, and credit must be provided to you.
B. CC BY-ND	II. This license lets others remix, tweak, and build upon your work even for commercial purposes, as long as they credit you and license their new creations under the identical terms.
C. CC BY-NC-SA	III. This license is the most restrictive of our six main licenses, only allowing others to download your works and share them with others as long as they credit you, but they can't change them in any way or use them commercially.
D. CC BY-NC-ND	IV. This license lets others remix, tweak, and build upon your work non-commercially, as long as they credit you and license their new creations under the identical terms.

- (A) A-I, B-II, C-III, D-IV
 (B) A-II, B-I, C-IV, D-III
 (C) A-I, B-II, C-IV, D-III
 (D) A-III, B-IV, C-I, D-II

55. Which of the following are single row functions?

- A. MAX()
 B. SUM()
 C. MOD()
 D. DAY()

- (A) A and B only
 - (B) B and D only
 - (C) A and C only
 - (D) C and D only
-

56. _____ method can also be used to change the data values of a row to a particular value.

- (A) DataFrame.values[]
 - (B) DataFrame.change[]
 - (C) DataFrame.loc[]
 - (D) DataFrame.datavalues[]
-

57. Match the LIST-I with LIST-II

LIST-I (Components of Teamwork)	LIST-II (Description)
A. Communication	I. Understanding the idea
B. Listen	II. e-mails and telephonic meeting can be done
C. Share	III. Listening the views of the team members
D. Respect	IV. All of the members communicates their expertise and experience among the groups

- (A) A-IV, B-II, C-III, D-I
 - (B) A-I, B-II, C-III, D-IV
 - (C) A-II, B-I, C-IV, D-III
 - (D) A-II, B-IV, C-I, D-III
-

58. What is the purpose of JavaScript in a website?

- (A) It helps to store the data.
 - (B) It makes the website interactive and dynamic.
 - (C) It provides structure to the website.
-

(D) It adds styling to the webpage.

59. In the context of project, where it require many individuals efforts to accomplish a task is known as _____.

- (A) Teamwork
 - (B) Monitoring
 - (C) Guidance
 - (D) Outcome
-

60. Which of the following function of Pandas will replaces value by the value before the missing value?

- (A) `df.fillna(method='bfill')`
 - (B) `df.fillna(method='pad')`
 - (C) `df.fillna(method='afill')`
 - (D) `df.fillna(method='fillpad')`
-

61. What does a left-skewed histogram indicate?

- (A) The mean is less than the median.
 - (B) The data is evenly distributed.
 - (C) The highest frequency is at the right end.
 - (D) There are no outliers.
-

62. Which property can be used to fill to each hist with pattern in histogram?

- (A) `explode`
- (B) `fill`

- (C) patch
 - (D) hatch
-

63. Arrange the following steps of project based learning:

- A. Guidance and Monitoring
- B. Defining a plan
- C. Identification of project
- D. Outcome of project

- (A) C, B, A, D
 - (B) A, B, C, D
 - (C) B, A, D, C
 - (D) C, B, D, A
-

64. How do you select rows from a DataFrame 'df' where the 'Salary' column is greater than 50000?

- (A) `df.select_rows("Salary>50000")`
 - (B) `df[df['Salary'] > 50000]`
 - (C) `df["Salary>50000"]`
 - (D) `df.rows("Salary>50000")`
-

65. In case of plots in Python, Marker "3" describes _____.

- (A) `tri_right`
 - (B) `tri_left`
 - (C) `tri_down`
 - (D) `tri_up`
-

66. Arrange the steps required to read data from a MySQL database to a DataFrame:

- A. pip install pymysql
- B. pip install sqlalchemy
- C. pandas.read_sql_query(query, sql_conn)
- D. engine=create_engine('driver://username:password@host/name_of_database', index=false)

- (A) A, B, D, C
 - (B) B, C, A, D
 - (C) B, A, C, D
 - (D) C, B, D, A
-

67. Which function is used to sort a Pandas DataFrame in descending order based on a column?

- (A) df.sort_values(by='column_name', ascending=False)
 - (B) df.sort(by='column_name', order='desc')
 - (C) df.order_by('column_name', reverse=True)
 - (D) df.sort_data('column_name', descending=True)
-

68. Which function is used to get the quartiles from a dataframe 'df'?

- (A) df.quartile()
 - (B) df.pivot()
 - (C) df.quantile()
 - (D) df.qt()
-

69. _____ is the global network of computing devices.

- (A) HTML
 - (B) Internet
 - (C) Protocol
-

(D) VoIP

70. Recent cyber crime that include locking a person out of his/her own device until a payment is made can be termed as _____.

- (A) Identity theft
 - (B) Phishing
 - (C) Ransomware
 - (D) Spamming
-

71. _____ gives the transpose of a DataFrame.

- (A) DataFrame.TP
 - (B) DataFrame.Trans
 - (C) DataFrame.T
 - (D) DataFrame.Transpose
-

72. Which SQL query correctly filters out groups with a total sales amount greater than 10,000?

- (A) SELECT CustomerID, SUM(Sales) FROM Orders WHERE SUM(Sales) > 10000 GROUP BY CustomerID;
 - (B) SELECT CustomerID, SUM(Sales) FROM Orders GROUP BY CustomerID ORDER BY SUM(Sales) > 10000;
 - (C) SELECT CustomerID, SUM(Sales) FROM Orders GROUP BY CustomerID HAVING SUM(Sales) > 10000;
 - (D) SELECT CustomerID, SUM(Sales) FROM Orders WHERE Sales > 10000 GROUP BY CustomerID;
-

73. Match the LIST-I with LIST-II

LIST-I (SQL Clause)	LIST-II (Description)
A. GROUP BY	I. Is used to fetch some rows on the basis of common values in a column.
B. HAVING	II. Is used to specify conditions on rows with Group By clause.
C. ORDER BY	III. Is used to display data in an ordered form.
D. WHERE	IV. Is used to retrieve data that meets certain conditions.

- (A) A-III, B-II, C-IV, D-I
 (B) A-I, B-II, C-III, D-IV
 (C) A-II, B-III, C-I, D-IV
 (D) A-I, B-IV, C-III, D-II

74. With reference to the parameter header of `pd.read_csv()`, which of the parameter values allow the column names to be inferred from the first line of csv file?

- A. header = 1
 B. header = 0
 C. header = True
 D. header = False

- (A) A and D only
 (B) B and C only
 (C) B only
 (D) C only

75. Which of the following describes plagiarism?

- (A) Creating original content based on inspiration
 (B) Copying someone else's work without giving proper credit
 (C) Modifying open-source software legally
 (D) Sharing content under a Creative Commons license

76. Which of the following operation combines tuples from two relations resulting in all pairs of rows from the two input relations, regardless of whether or not they have the same values on common attributes?

- (A) Union
- (B) Cartesian Product
- (C) Join
- (D) Intersection

77. What will be the output of the following code?

```
»» seriesCapCntry = pd.Series(['NewDelhi', 'WashingtonDC', 'London', 'Paris'],  
index=['India', 'USA', 'UK', 'France'])  
»» seriesCapCntry[1:3]
```

- 1. USA WashingtonDC
 UK London
- 2. WashingtonDC
 London
- 3. USA WashingtonDC
 UK London
 France Paris
- 4. India New Delhi
 USA WashingtonDC
 UK London

- (A) 1
- (B) 2
- (C) 3
- (D) 4

78. For the DataFrame (df) given below, which of the following are correct ways to access column 'Texas'?

	Texas	California
1	44	45
2	55	34
3	23	67
4	67	33

- A. df['Texas']
- B. df("Texas")
- C. df.Texas
- D. df.["Texas"]

- (A) B and D only
- (B) A and C only
- (C) B, C and D only
- (D) A, B and C only

79. What does the df.isnull().sum() function do in Pandas?

- (A) It finds the number of NaN values corresponding to each attribute.
- (B) It fills the number of NaN values with average value in the DataFrame.
- (C) It checks if there are any NaN values in the DataFrame.
- (D) It fills NaN values with zeros in the DataFrame.

80. Arrange the following steps in working of a dynamic web page:

- A. HTTP response
- B. An Application program handles HTTP requests
- C. The program executes and produces HTML output
- D. HTTP request

- (A) A, B, C, D
 - (B) D, B, A, C
 - (C) D, A, B, C
 - (D) D, B, C, A
-

**81. In the context of Project based learning, the following question has to be solved-
What is the total population, total male population and total female population aged 10 to 24
in India?**

Arrange the following solution steps to accomplish the same:

- A. Read CSV file and check the shape of the DataFrame.
- B. Identify the columns and the number of rows that you wants to use for plotting.
- C. Create a new DataFrame containing the filtered data and Group data as per the requirement.
- D. Plot data for the DataFrame.

- (A) A, B, C, D
 - (B) D, B, C, A
 - (C) B, A, D, C
 - (D) C, B, D, A
-

82. Which of the following is a benefit of Free and Open Source Software (FOSS)?

- (A) High licensing fees
 - (B) Inability to modify the software
 - (C) Community collaboration and ongoing improvements
 - (D) Restricted access to the source code
-

83. How can you display percentage values inside a pie chart in Matplotlib?

- (A) Use the autopct="%1.1f%%" argument in plt.pie()

- (B) Enable `show_labels=True` in `plt.pie()`
 - (C) Add `percentage="on"` inside `plt.pie()`
 - (D) It is not possible to display percentages inside slices
-

84. To show a forecast of a stock performance throughout the year, which plot is most suitable?

- (A) Scatter Plot
 - (B) Bar Plot
 - (C) Box Plot
 - (D) Line Plot
-

85. What is the best way to verify the legitimacy of an email claiming to be from your bank?

- (A) Clicking on any links in the email to check their authenticity.
 - (B) Contacting the bank directly using their official website or phone number.
 - (C) Replying to the email and asking for proof of legitimacy.
 - (D) Downloading and running any attachments in the email.
-