



RAN-2511000903011003

BCA (Data Science & Analytics) (Sem.-III) Examination November - 2025 Advance Worksheet and Python for Data Science and Analytics (Major-I)

સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) All questions are compulsory.
- (3) Figures to the right indicate full marks.

Seat No.:

Student's Signature

Q.1. Attempt the following (Any Four)

4

1. Which chart type is best suited to show cumulative effect of values?
 - A. Histogram
 - B. Combo Chart
 - C. Waterfall
 - D. Box Plot
2. A lambda function in Python is:
 - A. A function with multiple return values
 - B. A function with no name (anonymous function)
 - C. A recursive function
 - D. A built-in library function
3. Which function is best suited for replacing a specific word within text?
 - A. LEFT()
 - B. SUBSTITUTE()
 - C. FIND()
 - D. MID()
4. Which comprehension is valid for creating a dictionary?
 - A. {x for x in range(5)}
 - B. {x:x**2 for x in range(5)}
 - C. [x:x**2 for x in range(5)]
 - D. (x:x**2 for x in range(5))
5. Which file mode in Python is used to append text?
 - A. "r"
 - B. "w"
 - C. "a"
 - D. "x"

Q.1. B. Answer in short Question (Any Four)

4

1. Write the formula to extract the first 5 characters of a text in Excel.
2. Differentiate between map () and filter ().
3. Explain the difference between Goal Seek and Solver.
4. How do you read a text file in Python?
5. Write the difference between write () and append () file operations.

Q.2. Attempt the following in details.

- A. What is type affinity in SQLite? Explain the data types supported by SQLite with examples.

5

OR

- A. Discuss TEXTJOIN,MID,FIND text functions with example.

Q.2. B. Discuss Waterfall and Histogram chart. 4

Q.3. Write in detail (Any two). 8

- A. What are List and Dictionary comprehensions in Python? Explain their advantages over traditional loops.
 - B. Describe and compare VLOOKUP and HLOOKUP
 - C. Define Text-to-Columns, TRIM and CLEAN in excel.
-