



RAN-2511000902011003

First Year Bachelor of Computer Applications (NCF-NEP) (Sem. - II)

Examination September - 2025

Major - 01 : Programming Skills Using Python (TH) New (Paper - 204-02)

Time: 1 Hour]
[Total Marks: 25
સૂચના : / Instructions

(1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.

Fill up strictly the above details on your answer book.

Seat No.:

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Student's Signature

Q. 1. A. Answer Following (Any four)
(04)

1. What is the output of the following code?

```
x = "Hello"
```

```
print(x[1])
```

a) H

b) e

c) 1

d) o

2. Which among following keyword is used to define a function in Python?

a) def

b) function

c) func

d) define

3. Which code among these is the correct choice to concatenate two strings?

a) string1 + string2

b) string1.append(string2)

c) string1.concat(string2)

d) string1 - string2

4. Give the correct output for the given code.

```
x = 12
```

```
if x < 5:
```

```
    print("Less")
```

```
else:
```

```
    print("More")
```

a) Less

b) More

c) Error

d) No output

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

```
for i in range(5):
```

```
    if i == 3:
```

```
        break
```

```
    print(i)
```

a) 0, 1, 2

b) 0, 1, 2, 3

c) 0, 1

d) 0, 1, 2, 3, 4

6. Which among the following is correct to create a list in Python?

a) list1 = [0, 1, 2, 3]

b) list1 = (0, 1, 2, 3)

c) list1 = {0, 1, 2, 3}

d) list1 = <0, 1, 2, 3>

B. Answer following in one to two lines. (Any Four)
(04)

1. What are the numeric types supported in Python?

2. How can you assign values to multiple variables in one line in Python?
3. What is the difference between is and == operators in Python?
4. How does the range() function work in a for loop?
5. How to access elements in a list by index?
6. What is the difference between loc[] and iloc[] in Pandas?

Q. 2. Answer Following: (Any Two) (08)

- A. Explain the concept of Interpreter-based programming languages and how Python fits into this paradigm.
- B. Discuss the concepts of string slicing, negative indexing, and string concatenation in Python with appropriate examples.
- C. Describe the different types of iterative statements in Python. Explain the while loop, nested while loop, and the use of break and continue statements with examples.
- D. What is difference between Set and Tuple ? How to access data from Set ? Describe common set methods such as add(), clear() and copy().

Q. 3. Write Short-note on Following (Any Three) (09)

- A. Creating Pandas Data Frame using List.
- B. How to Convert a list of Lists into Dataframe?
- C. How to Read data from CSV file into Pandas DataFrame using the read_csv() function.
- D. How to Read and Write CSV files with delimiters other than the default comma.
- E. List out essential methods to measure Central Tendency using Numpy library.
