

**PG 1st Semester Examination, 2024**

**REMOTE SENSING & GIS**

*(Programming Languages)*

PAPER — RSG-108

*Full Marks : 25*

*Time : 1 hour*

**Answer all questions**

*The figures in the right hand margin indicate marks*

*Candidates are required to give their answers in their own words as far as practicable*

**GROUP—A**

Answer any **two** of the following questions :

1. What do you understand by the sentence that  
"tuples are immutable" ? 2 × 2

( Turn Over )

2. To read a integer from the console we write in python : `f=float(input("Enter a number"))`. What does the float mean here ?
3. What do you understand by *parameters* ?
4. What is the output of the following Python code ?  
`a = 13`  
`b = 3`  
`print(a//b ** a)`

**GROUP - B**

Answer any **two** of the following questions : 4 × 2

5. What is the purpose of the *continue* and *break* statements in Python ?
6. What are the rules to name a variable in python ?

7. What is lambda function in python ? Write a lambda function to convert a given string to uppercase.
8. Consider a list  $L = [10, 20, 22, 31, 13]$ . Find the output of the following statements.
- (a)  $L[0] = L[0] + 2$
  - (b)  $L = L * 2$
  - (c)  $L[::2]$
  - (d)  $L[-1] + L[1]$

**GROUP – C**

Answer any **one** of the following question :

9. (a) What is the main difference between a Python list and a NumPy array ? 8 × 1  
3
- (b) How do negative indices work in NumPy arrays ? 2
- (c) Explain with example how a csv file is imported in python. 3

( 4 )

**10. Write a Python code to take a number 'n' from user as input and generate all the prime numbers from 3 to  $n$ .**

**[ Internal Assessment — 05 Marks ]**

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