

KATHMANDU UNIVERSITY
End Semester Examination

14 January 2024

Level : B.E.
Year : IV
Time : 2 hrs. 30mins.

Course : GEOM 411
Semester : I
F. M. : 40

SECTION "B"

[6 Q × 4 = 24 marks]

Attempt *ANY SIX* questions.

1. Write a Python program that computes multiple ring buffer with atleast three distances provided by the program user.
2. Write a Python program that reads a text file and returns upper case characters and digits.
3. How can a variable length arguments be used in Python's functions? Demonstrate with an example program.
4. Briefly explain zip() with example code snippets. Describe range() with an example. [2 + 2]
5. Write a Python program that uses Tkinter's features which allows the users to input their name and address. The program should display the information read through label widgets.
6. How can a list be used as a stack and a queue? Please illustrate with examples.
7. Describe string slicing with example code snippets. Explain any two functions of calendar module. [2 + 2]

SECTION "C"

[2 Q. × 8 = 16 marks]

Attempt *ALL* questions. Assume data if necessary.

8. Write a Python program that displays the name of municipalities where a project lie. The program should ask it's user to provide the name of the shapefile containing municipal boundaries as well as the number and coordinates of the vertices of the project area's boundaries. [8]
9. Describe CheckProduct() function of arcpy module in detail. Write a program to merge two dictionaries. [4 + 4]

