

KATHMANDU UNIVERSITY
End Semester Examination
14- January 2024

Marks Scored:

Level : B.E.
Year : IV

Course : GEOM 411
Semester : I

Exam Roll No. :

Time: 30 mins.

F. M. : 10

Registration No.:

Date :

SECTION "A"
[20Q. × 0.5 = 10 marks]

Encircle the most appropriate option from each set of choices.

- What are the values of the following Python expressions?
 $2^{(3^2)}$
 $(2^3)^2$
 2^3^2
a. 512, 64, 512 b. 512, 512, 512 c. 64, 512, 64 d. 64, 64, 64
- Which of the following is NOT a core data type in Python programming?
a. Tuples b. Lists c. Dictionary d. Class
- What will be the output of the following Python code snippet?

```
for i in [1, 2, 3, 4][::-1]:  
    print(i, end='')
```


a. error b. 1 2 3 4 c. 4 3 2 1 d. 1 2 3
- How many *except* statements can a try-except block have?
a. 0 b. 1 c. > 0 d. > 1
- What happens when `'1' == 1` is executed?
a. True b. False c. TypeError d. ValueError
- To open a file `c:\mark.txt` for reading, we use:
a. `f = open("c:\ mark.txt", "r")` b. `f = open("c:\\ mark.txt", "r")`
c. `f = open(file = "c:\ mark.txt", "r")` d. `f = open(file = "c:\\ mark.txt", "r")`
- To read multiple lines of the file from a file object "f" and returns as a list, we use:
a. `f.read(2)` b. `f.read()` c. `f.readline()` d. `f.readlines()`
- What will be the output of the following Python function?

```
import random  
random.choice('KU')
```


a. K b. U c. either K or U d. error
- What happens if the base condition is not defined in recursive programs?
a. The program runs once and get existed
b. The program runs 'n' number of times where 'n' is the argument given to the function
c. An exception is thrown
d. The program gets into an infinite loop

10. What is the data type of (10)?
 a. Tuple b. Integer c. List d. Set
11. The data type of [(10,10),(20,20),(30,30)] is _____.
 a. an array of tuples b. a list of tuples
 c. a tuples of lists d. an invalid type
12. What will be the output of the following code?
`[ord(ch) for ch in 'XYZ']`
 a. [88, 89, 90] b. [97, 98, 99] c. [120, 121, 122] d. an error
13. What will be the output of the following code?
`x={"x":10,"y":20,"z":30}`
`y=dict(zip(x.values(), y.keys()))`
`print y`
 a. {"x","y","z"} b. {10, 20,:30}
 c. {"x":10,"y":20,"z":30} d. {10: 'x', 20: 'y', 30: 'z'}
14. A variable defined outside a function is referred to as _____.
 a. a static variable b. a global variable
 c. a local variable d. an automatic variable
15. To insert 5 to the third position in list1, _____ is used.
 a. list1.insert(3, 5) b. list1.add(3, 5)
 c. list1.insert(2, 5) d. list1.append(3, 5)
16. config() in Python Tkinter is used to _____.
 a. place the widget b. destroy the widget
 c. configure the widget d. change property of the widget
17. Which of the following is used to count the number of features a shapefile contains?
 a. shapefile.GetFeatureCount() b. GetFeatureCount(shapefile)
 c. layer.GetFeatureCount() d. GetFeatureCount(layer)
18. Which of the following is used to create a multiple line string feature using GDAL library?
 a. ogr.Geometry(ogr.wkbMultiLineString)
 b. gdal.Geometry(ogr.wkbMultiLineString)
 c. ogr.Geometry(ogr.wkbLineString)
 d. gdal.Geometry(ogr.wkbMLineString)
19. Pick the correct statements to set and clear the workspace in arcpy.
 a. arcpy.workspace = "workspace", arcpy.ClearEnvironment("workspace")
 b. arcpy.SetEnvironment ("workspace"), arcpy.ClearEnvironment("workspace")
 c. arcpy.SetEnvironment ("workspace"), arcpy.env.workspace=""
 d. arcpy.env.workspace = "workspace", arcpy.ClearEnvironment("workspace")
20. _____ returns a list of geoprocessing tools.
 a. listTools ({wild_card}) b. ListTools ({wild_card})
 c. listToolboxes ({wild_card}) d. ListToolboxes ({wild_card})