

KATHMANDU UNIVERSITY
End Semester Examination
May/June, 2022

Marks Scored:

Level : B.E.
Year : II

Course : GEOM 206
Semester : II

Exam Roll No. : Time: 30 mins.

F. M. : 10

Registration No.:

Date : June-13, 2022

SECTION "A"

[15Q. \times 0.5 = 7.5 marks]

Encircle the most appropriate answer.

- Which of the following spectral range is sensible to the cone cells of our eyes?
a. 400-600 nm b. 400-700 nm c. 500-700 nm d. 300-600 nm
- The LCC projection preserves
a. Orientation b. Distance c. Area d. Shape
- Rule of highlighting most crucial features that occupy small area compared to the total map area is called
a. Hierarchy b. Emphasis c. Visual balance d. Clarity
- Which scale is the largest among the given?
a. 1:500 b. 1" = 100' c. 1 cm = 10 m d. 1cm = 4 km
- According to the projection system used by Nepal, what is the range of Easting value for any point?
a. 500000 - 650000 m b. 2900000 - 3400000 m
c. 350000 - 650000 m d. 350000 - 500000 m
- The reason for increased density of map contents due to scale reduction is
a. Symbolization b. Generalization c. Visualization d. Aggregation
- Chloropeth maps should only be used to display spatial variables.
a. Extensive b. Nominal c. Ordinal d. Intensive
- Which of the following is not Bertin's visual variable?
a. Size b. Grain c. Value d. Pattern
- In cartographic terms, what is neat line?
a. The line enclosing the body of the map
b. The line enclosing the marginal information on the map
c. The line joining the grid value on the map
d. The line joining the graticule values on the map

10. _____ a letter, character, or any other graphic device representing some feature, quality or characteristics on a map or charts?
 a. Map face b. Digital image c. Symbol d. Scanned Image
11. Which of the following relief representation is considered to be suitable for maps of scale 1:250000 or smaller?
 a. Contour b. Layer Tinting c. Rock Drawing d. Spot heights
12. The Lower left corner value of the sheet 2785-13C is
 a. $27^{\circ}N, 85^{\circ}E$ b. $27^{\circ} 07' 30''N, 85^{\circ}07' 30''E$
 c. $27^{\circ}N, 85^{\circ}07'30''E$ d. $27^{\circ}N, 85^{\circ}07'30''E$
13. What is the false easting of Southern Hemisphere in UTM projection system?
 a. 500 Km b. 10,00 Km c. 1500 Km d. 2000 Km
14. Remote Sensing Imagery is the best example of
 a. Chorochromatic map b. Choropleth maps
 c. Isoline maps d. Isopleth maps
15. If map is revised in certain interval of time only, it is known as
 a. Periodic map revision b. Continuous map revision
 c. Periodic or cyclic map revision d. Cyclic Map Revision

SECTION "B"

[5Q. \times 0.5 = 2.5 marks]

Fill in the blanks.

16. Scale distortions can be measured and shown on a map by ellipses of distortion, called _____.
17. Basic three components of GIS consist of _____.
18. Country with large in size and having rectangular in shape should choose _____ as an ideal projection system.
19. Geometry and Location of the objects are affected in _____ generalization.
20. Four measurement scales are _____.

KATHMANDU UNIVERISTY
End Semester Examination
May/June, 2022

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

Course : GEOM 206
Semester : II
F.M. : 40

SECTION "C"
[6Q. × 4 = 24 marks]

Attempt *ANY SIX* questions.

1. Define cartography. Explain the role of cartography in GIS. [2+2]
2. Discuss any two map revision methods. Illustrate the map revision process with flow diagram. [2+2]
3. Describe the Cartographic Communication Model. [4]
4. Illustrate any three methods of relief representation on topographic maps. Mention demerits of using combination of two or more methods while depicting relief. [3+1]
5. What is the importance of generalization in map compilation? Differentiate between graphic and conceptual generalization. [2+2]
6. What do you understand by Visual Variable? Write in brief about each Bertin's Visual Variables with an example for each mentioning how do you use it. [1+3]
7. Write short notes on (*ANY TWO*): [2+2]
 - i. Interactive maps
 - ii. United Nations Group of Experts on Geographical Names (UNGEGN)
 - iii. Drawing pens

SECTION "D"
[2Q. × 8 = 16 marks]

Attempt *ANY TWO* questions.

8. Define sheet numbering system and its purpose. Explain sheet numbering system adopted for topographical base maps of Nepal. [3+5]
9. Which projection system has been followed in Nepal? Write its characteristics. Do you think the projection system is suitable for Nepal? If your answer is yes, give reasons and if your answer is no, suggest the suitable projection system with reasons. [1+3+4]
10. Why do we require map generalization? Discuss different types of map generalization methods. [4+4]

