

KATHMANDU UNIVERSITY
End Semester Examination
January/February, 2024

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

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

SECTION "B"
[6Q. × 4 = 24 marks]

Attempt *ANY SIX* questions.

1. Explain the concept of cartography. Elaborate cartographic communication process with appropriate diagram. [1+3]
2. Explore the connection between geodesy and cartography. Discuss the interrelation of Cartography with Geographic Information System (GIS). [2+2]
3. Define map generalization and elucidate why it is crucial for cartographers. Highlight the distinctions between conceptual and graphical generalization. [1+1+2]
4. List various methods for representing relief on maps and elaborate on different interpolation techniques commonly used for contouring. [1+3]
5. Provide a definition of map revision and its types. Briefly outline the steps involved in Map Verification. [2+2]
6. Elaborate the characteristics that define good map design, supported by relevant examples. [4]
7. Write short notes on *ANY TWO*. [2×2=4]
 - a. Transliteration
 - b. Factors affecting choice of Map projection
 - c. Visual variables

SECTION "C"
[2Q. × 8 = 16 marks]

Attempt *ANY TWO* questions.

8. Elaborate on the small-scale sheet numbering system and Topographical sheet numbering system implemented in Nepal. Determine the sheet number of Cadastral Sheet, with a 1:500 scale, containing the point (356324, 3031222) assuming the point is situated in the zone with an 87-degree Central Meridian. [4+4]
9. Explain the concept of Map Projection. Provide a detailed examination of the features of the Map Projection system currently employed in Nepal, including its strengths and weaknesses. Recommend an alternative projection system to overcome the challenges associated with the current one. [1+5+2]
10. Specify the features of high-quality drawing paper and scribing coat. Elaborate on the conventional method of map production, incorporating a suitable diagram. [4+4]

