NATIONAL UNIVERSITY OF LESOTHO

GES 2535-14 – INTRODUCTION TO CARTOGRAPHY, MAPPING AND SURVEYING

BA URP SUPPLEMENTARY EXAMINATIONS

AUGUST 2023   **MARKS: 100**   **TIME: 3 HOURS**

INSTRUCTIONS: Answer any four questions. Where necessary, illustrate your answers with diagrams

Question 1

Describe any three differences between Topographic Maps and Photo Maps. The differences to be covered should be based on their uses/importance as well as advantages and disadvantages.   [25]

Question 2

List any four factors that have to be considered (kept in mind) when working with line scales.   [25]

Question 3

It is desirable to preserve some of the geometric properties of the earth's grid when creating or using map projections. For each of the following projections, briefly describe their basic properties i.e what it is being maintained/preserved and what is likely to be distorted.

(a) Equivalent   [5]
(b) Conformal   [5]
(c) Equidistant   [5]
(d) Azimuthal   [5]
(e) Compromise   [5]
                                                                                                                          [25]

Question 4

Classify the type of map (Dot Density, Proportional Symbols, Choropleth, Flow, Cartograms)) to be used in each of the situations below (*Do not rewrite the whole sentence, just write the word).*

(a) A thematic map that scales the size of an enumeration unit proportionally to the represented value   [5]
(b) A thematic map that uniformly colours each non-overlapping enumeration unit according to the represented value   [5]
(c) A thematic map that places dots within an enumeration unit in proportion to the represented value to preserve the distribution and variation of density of a phenomenon.   [5]
(d) A thematic map that represents the direction and/or magnitude of a phenomenon along linear objects or between locations   [5]
(e) A map that scales the size of a point symbol proportional to the represented value.   [5]

                                                                                                                          [25]

Question 5

Describe any **fou**r (4) map elements that are selectively used to assist communication.   [**25**]

Question 6

Make brief notes on the following characteristics of maps.
a. Reduced   [5]
b. Selective   [5]
c. Symbolized   [5]
d. Tangible   [5]
e. Virtual   [5]
                                                                                                [25]