

**Bago University**  
**Department of Geography**  
**Second Semester Examination, September, 2019**

**Second Year (B.A)**  
**(Geography Specialization)**

**Geog. 2108**  
**Fundamentals of Geographic**  
**Information Systems**  
**Time allowed: (3) hours**

**Answer ALL questions. Illustrate your answer with sketch maps and diagrams wherever necessary.**

I. Fill in the blanks with correct words.

1. Geographically referenced data are data that describe both the ----- and ----- of spatial features such as roads and land parcels.
2. -----model uses a grid and grid cells to represent the spatial variation of a feature.
3. The ----- model uses a split system to store spatial data and attribute data.
4. The UTM grid system divides the earth surface between 84°N and 80°S into -----.
5. Three basic vector objects exist: ----- . These objects are called features.
6. A ----- has multiple files, each of which contains different records and field.
7. ----- data separate GIS from other information system.
8. Components of a GIS are computer system, -----, ----- and infrastructure.
9. The union classification creates every possible ----- from the combined input layers.
10. A -----database has multiple tables stored as files.

II. How is the Datum defined? Explain detail earth-center datum and local datum.

III. Enumerate “suitability analysis on evaluating a landscape to find which areas best serve a given purpose based on a set of factors”.

IV. Make an analysis on vector data model.

V. Make a comprehensive account on Map overlay and overlay with attribute.

VI. Write any two short notes.

- (a) Color concept of Black and White,
  - (b) Color concept of HSV
  - (c) Jenks and equal interval method for classification numeric data
  - (d) A quantile classification.
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