# Final Exam

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<th>Question No.</th>
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| Total        |            |           |
Question 01: (20 Points)

A) An information system consists of a chain of operations. Describe these operations?
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B) The GIS can describe our world in two ways. How that?
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C) What does GIS do? List five of it.
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D) There are many different types to store the Vector and Raster data. Discuss with examples this phrase?

E) There are many views of a GIS. Discuss in details one of these views?
Question 02: (20 points)

A) Multiple-choice questions: Choose the correct answer:

1. Which of the following is true?
   - (    ) The Georeferencing is defining how Raster data are situated in real word
   - (    ) The Georeferencing is defining how TIN Model are situated in real word
   - (    ) The Georeferencing is defining how DEM(Digital Elevation Model) are situated in real

2. In a TIN model, the world is represented as a network of:
   - (    ) linked Circles.
   - (    ) linked triangles.
   - (    ) linked squares.

3. The smaller the cell size for the raster layer:
   - (    ) the lower the resolution and the more detailed the map.
   - (    ) the lower the resolution and without the detailed the map.
   - (    ) the higher the resolution and the more detailed the map.

4. By Geocoding, You can plot:
   - (    ) Points by geolocating tables of addresses on an existing street network
   - (    ) Polylines by geolocating tables of addresses on an existing street network
   - (    ) Polygons by geolocating tables of addresses on an existing street network

5. Which of the following are characteristics of data quality?
   - (    ) Logical consistency.
   - (    ) Classification, and the identification of relationships.
   - (    ) The size-shape ratio of irregular polygons.
B) In the following put (✓) for the true and put (X) for the false:

1. (   ) Approximately 20% of ALL data stored is related to a geographic location.

2. (   ) GIS can resolve only the simple issues not the complex Issues.

3. (   ) Maps are only one of three views of a GIS.

4. (   ) GIS can not borrow from Relational Database Management System.

5. (   ) The application of GIS is limited only by the imagination of those who use it.

Question 03: (20 points)

A) List five methods of data input for a GIS?

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B ) Describe in details the process of creating the project database?

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Question 04: (20 points)
A) What is a Topology?
B) What are the topological relationships?
C) What are Advantages and uses of topology?
D) Complete the following table:

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<th>Arc</th>
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<th>Right polygon</th>
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Question 05: (20 points)

A) What is GPS? List three of Applications of GPS?

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B) Explain the difference between the Information and Data. Give one example?

C) What is the Map layout consists of?
D) In the Figure below, which the Map is good? Why?

**D.1 Maps**

![Eli County, VA - Black Heritage Trail Map](image1)

![Black Heritage Trail Eli County, VA Map](image2)

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**D.2 Maps**

![Earwig Bites in Ohio Map](image3)

![Earwig Bites in Ohio Per 1000 persons, by county, 2000 Map](image4)
E) Describe three uses of a GIS that exemplify the diversity of possible applications?