



# Unit 2 - Week 1

## Course outline

### How to access the portal ?

#### Week 1

- What is Geographic Information System
- Different Components of GIS
- Different types of vector data and concept of topology
- Raster data model and comparisons with vector
- TIN data model and comparisons with raster
- Quiz : Assignment: Week 1
- Feedback Week-1
- Answer Key

#### Week 2

#### Week 3

#### Week 4

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## Assignment: Week 1

The due date for submitting this assignment has passed. **Due on 2018-02-21, 23:59 IST.**

### Submitted assignment

1) GIS is ..... and ..... technology.

1 point

- ☐ Digital and analogue
- ☐ Spatial and analogue
- ☐ Digital and spatial
- ☐ Spatial and manual

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Digital and spatial*

2) GIS, Remote Sensing and GPS technologies are:

1 point

- ☐ Generic, digital and spatial
- ☐ Manual, spatial and digital
- ☐ Analogue, manual and spatial
- ☐ Generic, analogue and spatial

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Generic, digital and spatial*

3) Three basic kinds of vector entities are:

1 point

- ☐ Point, Raster, Attributes
- ☐ Image, Raster, Polygon
- ☐ Point, Line/Polyline, Polygon
- ☐ Polyline, Polygon, Raster

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Point, Line/Polyline, Polygon*

4) Two major differences between Grid and Image:

1 point

- ☐ Both can have positive and negative, integer and real values
- ☐ Grid can have only positive integer values, whereas image can have any data
- ☐ Grid can have positive and negative integer and real values as cell values, whereas, image can have only positive integer values

- ☐ Grid can have only positive integer values as cell values, whereas, image can have both positive and negative integer and real values as pixel values

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Grid can have positive and negative integer and real values as cell values, whereas, image can have only positive integer values*

5) Major differences between Vector and Raster data models:

**1 point**

- ☐ Vector and raster are same data models
- ☐ Vector is continuous, whereas raster data model is discrete
- ☐ Vector and raster both are discrete
- ☐ Vector is discrete, whereas raster data model is continuous

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Vector is discrete, whereas raster data model is continuous*

6) Triangulated Irregular Network (TIN) is a:

**1 point**

- ☐ Discrete data model like vector data
- ☐ Discrete data model like raster data
- ☐ Neither vector nor raster data model
- ☐ Vector, Raster and TIN data models are same

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Neither vector nor raster data model*

7) Which data model requires less space for computer storage?

**1 point**

- ☐ Raster
- ☐ TIN
- ☐ Vector
- ☐ None of the above

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Vector*

8) Which of the following are true?

**1 point**

- ☐ Digitizing is defined as converting aerial photographs into maps
- ☐ A keyboard cannot be used to digitize maps, only to enter attribute information
- ☐ Digitizing from a tablet involves using a template
- ☐ Digitizing involves tracing map features into a computer

**No, the answer is incorrect.**

**Score: 0**

**Accepted Answers:**

*Digitizing involves tracing map features into a computer*

9) Spatial referencing is the process of which of the following?

**1 point**

- ☐ Combining attribute values with locational information
- ☐ Referencing geo-relational tables
- ☐ Computing the reference between items in databases
- ☐ Establishing the topology of spatial objects

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Combining attribute values with locational information*

10) Which of the following is not an example of spatial data?

1 point

- ☐ Points showing location of discrete objects
- ☐ Times of particular events
- ☐ Lines showing the route of linear objects
- ☐ Polygons showing the area occupied by a particular land use or variable

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Times of particular events*

11) Geographic Information System (GIS) is a ..... based information system designed to accept large volumes of ..... data derived from variety of sources and to efficiently store, retrieve, ..... model and display (output) these data according to ..... defined specifications.

1 point

- ☐ Manual, Special, Recover, All
- ☐ Manual, Temporal, Analyses, User
- ☐ Computer, Spatial, Analyses, User
- ☐ Computer, Timely, Delete, Not

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Computer, Spatial, Analyses, User*

12) By definition a GIS must include:

1 point

- ☐ A method for storing demographic information
- ☐ A method for scanning maps to produce raster files
- ☐ A method for digitizing maps to produce vector files
- ☐ Data analysis functions

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Data analysis functions*

13) Which of the following statement is true of the history of GIS?

1 point

- ☐ Public utilities were early users of automated mapping and GIS technologies.
- ☐ The development of the first true GIS depended upon the invention of the microcomputer in the early 1980s.
- ☐ Some of the first applications were groundwater exploration.
- ☐ Municipal government agencies have been slow to adopt GIS.

No, the answer is incorrect.

Score: 0

Accepted Answers:

*Public utilities were early users of automated mapping and GIS technologies.*

14) The TIN model represents a surface as a set of:

1 point

- ☐ Contiguous and non-overlapping triangles
- ☐ Contiguous and overlapping triangles
- ☐ Non-contiguous and overlapping triangles
- ☐ Non-contiguous and non-overlapping triangles

No, the answer is incorrect.

Score: 0

**Accepted Answers:***Contiguous and non-overlapping triangles*

15) GIS is unique because:

**1 point**

- ☐ GIS handles spatial information
- ☐ GIS handles special information
- ☐ GIS handles attributes
- ☐ GIS handles graphics

**No, the answer is incorrect.****Score: 0****Accepted Answers:***GIS handles spatial information*

16) Name five components of GIS

**1 point**

- ☐ Software, Data, Methods, Theory, Printers
- ☐ Hardware, Software, Data, Methods, People
- ☐ Hardware, Software, Maps, Data, Theory
- ☐ Software, Equations, Maps, Theory, People

**No, the answer is incorrect.****Score: 0****Accepted Answers:***Hardware, Software, Data, Methods, People*17) Image can have only .....integer pixel values, whereas grid can have .....  
and .....real and .....cell values.**1 point**

- ☐ Negative, Negative, Positive, Integer
- ☐ Positive, Negative, Negative, Integer
- ☐ Positive, Positive, Negative, Integer
- ☐ Negative, Positive, Positive, Real

**No, the answer is incorrect.****Score: 0****Accepted Answers:***Positive, Positive, Negative, Integer*

18) Human factors influence the success of GIS as a decision support tool.

**1 point**

- ☐ False
- ☐ True

**No, the answer is incorrect.****Score: 0****Accepted Answers:***True*

19) Reality can be represented in GIS as a series of layers or as objects.

**1 point**

- ☐ False
- ☐ True

**No, the answer is incorrect.****Score: 0****Accepted Answers:***True*

20) Attribute data are one type of spatial data.

**1 point**

- ☐ True
- ☐ False

**No, the answer is incorrect.****Score: 0**

**Accepted Answers:***False*[Previous Page](#)[End](#)

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