8. CORRECT Which of the following might be considered as the fourth dimension in GIS?

Your Answer: Time.

9. CORRECT Object-oriented models in GIS refer to models where data is:

Your Answer: organized into a single layer containing all entities.

10. CORRECT Which of the following problems might 3D data models be applied to?

Your Answer: Hydrological models.

Landscape visualization.

Visibility analysis.

11. CORRECT When using a vector data model the maximum number of points possible should be used to represent a feature.

Your Answer: False

12. CORRECT Run length encoding reduces the size of a raster data set on a row by row basis.

Your Answer: True

13. CORRECT Using a topological data structure prevents the repetition of data for lines shared by adjacent polygons.

Your Answer: True

14. CORRECT Island polygons cannot be handled in a topological data structure.

Your Answer: False

15. CORRECT The Ordnance Survey's MasterMap data is an example of an object oriented data set which is topologically structured.

Your Answer: True

16. CORRECT SAR and LiDAR data have a resolution of varying from 100-150m.

Your Answer: False

17. CORRECT The accuracy of a DTM created from GPS data will be low.

Your Answer: False

times of particular events.

8. CORRECT Aronoff (1989) classifies GIS analysis procedures into which of the following?

Your Answer: Those used for storage and retrieval.

Modelling procedures or functions for the prediction of what data might be at a different time and place.

Constrained queries that allow the user to look at patterns in their data.

9. CORRECT Spatial referencing is the process of which of the following?

Your Answer: Combing attribute values with locational information.

10. CORRECT Geographical Information Science (GISc) can be defined as:

Your Answer: the science behind GIS.

11. CORRECT Performing the same analysis in two different GIS software packages will always give the same results.

Your Answer: False

12. CORRECT Human factors influence the success of GIS as a decision support tool.

Your Answer: True

13. CORRECT Reality can be represented in GIS as a series of layers or as objects.

Your Answer: True

14. CORRECT Attribute data are one type of spatial data.

Your Answer: False

16. CORRECT A line is a string of (x,y) coordinates joined together in order and connected with straight lines.

Your Answer: True

17. CORRECT Island polygons are only used to represent real world islands that are surrounded by water.

Your Answer: False

18. CORRECT A map at a scale of 1:2,000 would be suitable for planning street engineering works such as repairs to gas or water pipes.

Your Answer: True

19. CORRECT A map at a scale of 1:250,000 would be suitable for navigation whilst on a mountain trek.

Your Answer: False

20. CORRECT The mercator projection is an example of a cylindrical projection.

Your Answer: True

21. CORRECT The Prime Meridian runs through Moscow.

Your Answer: False

22. CORRECT The depth of water in a lake is an example of a ratio scale measurement.

Your Answer: True

23. CORRECT LiDAR data are collected using laser technology.

Your Answer: True

E-mail Your Results

My name is (first last):		
E-mail my results to:		
	E-mail address:	**Send as:**
Me		Text
Instructor		Text
TA		Text
Other		Text
Help		E-mail Results

Your Answer: True

---

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Your Answer: False

---

18. CORRECT DTMs can be created by digitizing from a paper map.

Your Answer: True

---

19. CORRECT A 'surface significant' point in a TIN model is one which can be closely interpolated from its neighbours.

Your Answer: False

---

20. CORRECT The number of places available at a school could be used as a 'supply' variable in a network used for routing school transport.

Your Answer: True

---

21. CORRECT A wire frame diagram is a 2.5D representation.

Your Answer: True

---

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	E-mail address:	**Send as:**
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TA		Text
Other		Text
Help		E-mail Results

1. CORRECT The vector data model is based on which of the following?

Your Answer: Cartesian coordinate system.

Collections of points joined by straight lines.

---

2. CORRECT The raster data model is based on which of the following?

Your Answer: Tesselations.

Grid cells or pixels grouped to form spatial entities.

Grid cells.

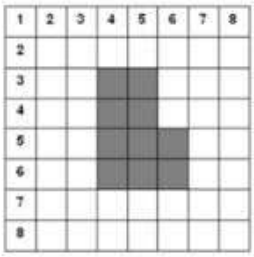
---

3. CORRECT Which of the following is NOT a raster data structure?

Your Answer: Spaghetti.

---

4. CORRECT



For the above entity, which of the following chain encoding solutions is correct?

Your Answer: 4,6 1 N,4 E,1 S,1 E,1 S,1 W,2

---

5. CORRECT Which of the following are advantages of DEMs over TINs when creating Digital Terrain Models (DTMs)?

Your Answer: DEMs use a simple data model.

DEMs can directly accept inputs from digital height grids.

---

6. CORRECT Which of the following are methods of identifying surface significant points in the construction of a TIN?

Your Answer: The skeleton method.

The filter or VIP method.

The drop heuristic method.

---

7. CORRECT Which of the following are applications of network analysis?

Your Answer: Flood routing.

Shortest path calculations.

Travelling salesperson problem.

8. CORRECT The UK's Ordnance Survey National Grid is an example of which type of projection?

Your Answer: Universal Transverse Mercator.

9. CORRECT Using the UK postcode system, the postcode 'DL7 8' represents which of the following levels of this hierarchical system?

Your Answer: Postal sector.

10. CORRECT What scale of measurement may be used to represent area?

Your Answer: Ratio.

11. CORRECT Resolution may best be defined as:

Your Answer: the size of the smallest recording unit.

the smallest feature that can be mapped or measured.

12. CORRECT What does the abbreviation GPS stand for?

Your Answer: Global Positioning System.

13. CORRECT What is the name of the Russian equivalent of GPS?

Your Answer: GLONASS.

14. CORRECT How many satellites are used in the US NAVSTAR GPS satellite constellation?

Your Answer: 24

15. CORRECT What is the name of the Open GIS Consortium's XML-based universal data standard?

Your Answer: GML.

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Your Answer: True

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Your Answer: False

Submitted:

1. CORRECT Which three of the following questions may be best answered using a GIS?

Your Answer: Where is a particular feature found?

Where do certain conditions apply?

What geographical patterns exist?

2. CORRECT Which of the following are key application disciplines for GIS?

Your Answer: Civil engineering.

Commerce and business.

Environmental sciences.

Transport.

3. CORRECT A GIS is 'a set of tools for collecting, storing, retrieving at will, transforming, and displaying spatial data from the real world for a particular set of purposes' is a well used definition of a GIS provided by:

Your Answer: Peter Burrough (1986).

4. CORRECT Which of the following list is the key area of GIS functionality missed out by the above definition?

Your Answer: Analysis.

5. CORRECT Which of the following is not a key concept that is part of our definition of GIS?

Your Answer: GIS can be used in all areas of modern science.

6. CORRECT Which of the following are essential components of a GIS?

Your Answer: Appropriate GIS software.

A visual display unit capable of high resolution colour graphical display as well as text.

Data input and output devices such as digitizers/scanners and printer/plotters.

A computer with sufficient memory and processing power to run the software.

Spatial data.

7. CORRECT Which of the following is not an example of spatial data?

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Date/Time Submitted: April 9, 2019 at 8:30 PM (UTC/GMT)

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1. CORRECT Which of the following are considered key elements of a paper map?

Your Answer: Projection information.

Annotation.

Map features (points, lines, areas, surfaces).

Scale bar or ratio.

---

2. CORRECT Which of the following list are appropriate definitions of scale?

Your Answer: The order of magnitude or level of generalization at which phenomena exist or are perceived or observed.

An indication of how big an object represented on the map is on the ground.

The ratio of a distance on a map to the corresponding distance on the ground.

---

3. CORRECT What does 1mm on a map drawn at a scale of 1:50,000 represent on the ground?

Your Answer: 50 metres.

---

4. CORRECT How is a large city most likely to be represented on a 1:25,000 scale map?

Your Answer: As a collection of points, lines and areas.

---

5. CORRECT Generalization is the process by which:
(check those that apply)

Your Answer: real-world features are simplified to allow them to be drawn on a map at reduced scale.

the cartographer communicates the spatial pattern and organization of real-world objects on a map.

real-world features are selected or not selected for inclusion on a map.

---

6. CORRECT Which of the following is an example of map generalization?

Your Answer: Polygon coordinate thinning.

---

7. CORRECT Which of the following is not a type of map projection?

Your Answer: Geographic.
