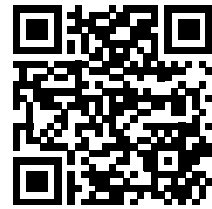


name: _____

class: _____

date: _____

Data Visualization in Geographical Information Systems



Data visualization plays a critical role in understanding the complex data generated by Geographical Information _____ (GIS). These systems collect, manage, and analyze data related to _____ on Earth's surface. Through data visualization, GIS can transform raw data into _____ and other visual formats, making it easier to identify patterns, trends, and relationships. For example, urban _____ use GIS to visualize the growth of cities and predict future development. They rely on _____ images and ground surveys to gather data about land use, population density, and _____. This information is then visualized to assist in planning roads, schools, and public _____.

Environmental scientists use GIS to monitor environmental changes, such as deforestation, _____ quality, and the spread of invasive species. By visualizing these changes, they can better understand their _____ and develop strategies for conservation. In agriculture, farmers utilize GIS to optimize crop _____. They analyze soil data, precipitation patterns, and crop rotations, visualizing this _____ to make informed decisions about planting and irrigation.

GIS is also essential in disaster _____. Agencies map affected areas to coordinate rescue operations and deliver aid more effectively. _____ help responders understand the extent of damage and prioritize their efforts. In public _____, GIS tracks the spread of diseases by visualizing cases over time and _____. This helps health officials make decisions about where to allocate _____ and how to control outbreaks.

Data visualization in GIS is not just about creating maps. It includes _____, graphs, and 3D models that provide deeper insights into the data. For instance, _____ visualizations of urban areas can help assess the impact of new buildings on sunlight and wind _____ in neighborhoods. The key is to present GIS _____ in a way that is easy to understand and act upon, making data visualization an indispensable _____ in various fields.

- satellite
- impact
- information
- Visualizations
- tool
- services
- planners
- health
- patterns
- yields
- charts
- data
- locations
- Systems
- response
- water
- infrastructure
- 3D
- resources
- maps
- space