

University of South Australia
School of Geoinformatics, Planning and Building
Geographical Information Systems 2 (13042)

Time allowed 2 hours

Answer **ten** (10) questions.

1. What is descriptive statistics and inferential statistics? What are the major differences between the two?
2. Describe the shortest path algorithm and how it is computed? What are the use of this algorithm?
3. What is mean center and what are it's necessary conditions? Give an example.
4. What are the properties of quadrat? Give an example of the use of quadrat in GIS.
5. What are the essential components of network data? Explain with a hypothetical network data you are familiar with.
6. What is shortest path matrix? Illustrate with an example.
7. What is spatial interpolation and why it is an important toll in a GIS?
8. Explain 'spline' and 'Inverse distance weighted' interpolation methods.
9. What is the basic structure of an request in Avenue programming in ArcView? Give an example.
10. Explain the steps involved in Weighted Linear Combination method.
11. What is GIS data accuracy? What are the elements of accuracy?
12. What are the general types of data error? Give examples.