

**UNIVERSITY OF SOUTH AUSTRALIA**

**School of Geoinformatics, Planning & Building**

**Spatial Systems 2N - 10226  
EXAMINATION**

**Semester 1, 2000**

Time Allowed: 2 hours + 10 minutes reading time

**General Instructions to Candidates**

**Total Marks = 50.**

**Attempt all questions.**

**Marks for questions are indicated in brackets.**

**This is a closed book examination.**

**Please ensure front of answer book is completed with your student name, student I.D. number and course.**

### **Question 1**

- (a) Describe in detail the structure of the ArcInfo PAL and ARC files in a polygon coverage. Use an accompanying diagram labelling your polygon structure and cross referencing this with your file descriptions. (15)
- (b) Provide a detailed algorithm of the steps a GIS will undertake to clean & build topology. (15)

### **Question 2**

With a brief description and supporting diagrams, discuss the operation of the following ArcInfo vector overlay functions:

- Clip
- Union
- Identity
- Intersect

Which of these functions replicate the generic AND and OR operators? (20)