

School of Geoinformatics, Planning & Building

Semester I 1999

Social Data and Analysis

Exam

1. Given the following data:

- Age Specific Fertility Rates for South Australia (Table 1.1),
- population data for the local government area of Gawler (Table 1.2)
- first born survival ratio of 0.9934 for males and 0.9945 for females

calculate:

- the number of children expected to be born in the period 1996-2001
- the number of these children expected to survive into the 0-4 age cohort in the year 2001

12 marks

Table 1.1: Age Specific Fertility Rates for South Australia 1996

Age of Mother	Fertility Rate
15-19	18.3
20-24	62.0
25-29	114.7
30-34	103.7
35-39	42.1
40- 44	8.1
45-49	0.3
Sex ratio	103.9 Males : 100 Females

Source: Adapted from Australian Bureau of Statistics: 1996: Births

Table 1.2: Gawler: Population by age and sex 1996 and projected population by age and sex 2001

Age	Population 1996		Projected Population 2001	
	Males	Females	Males	Females
0-4	564	175		
5-9	640	266	563	175
10-14	650	278	639	266
15-19	591	201	649	278
20-24	507	195	588	201
25-29	560	166	504	195
30-34	585	252	556	166
35-39	651	303	581	251
40-44	620	266	645	302
45-49	528	238	613	264
50-54	381	228	519	235
55-59	347	241	370	224
60-64	369	299	330	234
65-69	359	372	338	286
70-74	292	357	311	345
75+	360	657	429	721
Total	8004	4494		

Source: adapted from Australian Bureau of Statistics: Census Data 1996

2. Discuss **one** of the following:

either

- Changes in fertility in Australia since the turn of the century

or

- Contemporary trends in migration at either the national or regional level

8 marks

3. Discuss how assumptions made about the three components of population change influence population projections?

6 marks

4. A Strategic Planning Team has been assembled to address the impacts of economic restructuring on urban social development. The team has decided to create a quality of life index to determine the areas in greatest need. Complete the quality of life index (Table 4.1) and answer the following:

- Which four (4) local government areas have the highest quality of life?
- Which four (4) local government areas have the lowest quality of life?
- Discuss the indicators selected in terms of their usefulness in determining quality of life.
- What indicators would you use instead of, or in addition to, the indicators selected?

20 marks