MATRIC GEOGRAPHY PAPER 2 MEMORANDUM

1.1 B
1.2 D
1.3 A
1.4 C
1.5 D
1.6 D
1.7 A
1.8 C
1.9 A
1.10 A

2.1 Distance on map = 24 cm
24 cm x 0,5 km = 12 km
12 km + 120 km + 18 km = 150 km

2.2 Time = $\frac{\text{distance}}{\text{speed}}$
$= \frac{150 \text{ km}}{80 \text{ km/h}}$
= 1,9 hr
= 1 hr 54 min

2.3.1 Flatter land
2.3.2 People must cross railway line to get to the beach – dangerous
2.3.3 Ends in Block E3 and section still under construction in B6
2.3.4 Photograph was taken before the map was drawn as the section south of the bridge at Batstone's Drift has been completed on the map but not on the photograph.

Note: The calculations below were made using an A3 map. If you use an A4 map your calculations will be different.

2.4 Gradient = $\frac{\text{Vertical height}}{\text{Horizontal distance}}$
$= \frac{92 \text{ m} - 20 \text{ m}}{5 \text{ cm}}$
$= \frac{72}{500}$ (Divide by 72)
= 1: 6,9

2.5 No, as there is higher ground in between – there is a hill 108 m high.

2.6 Area = l x b = 1,9 cm x 1,7 cm = 190 m x 170 m = 32 300 m^2

3.1.1 Secondary activity
3.1.2 Yes, it would be flooded as the level of the water would rise to 20 m above sea level – the sawmill is at an altitude less than 20 m above sea level.

3.2

	Settlements in Block C1	***Settlements in Block A3***
Economic activity	Farming, primary activity, commercial	Farming, primary activity, subsistence
Settlement pattern	Dispersed/isolated	Nucleated/clustered
Services and infrastructure	Good roads, power supply, water supply	Poor roads, possibly no power and tap water

3.3.1 G4 – grid-iron; F4 – irregular

3.3.2 Grid-iron – advantage is that it is easy to locate places; disadvantage is that it is uninteresting and there are many stop streets. Irregular – advantage is that traffic flow is easier as there are fewer stop streets and it is attractive; disadvantage is that one can get lost easily.

3.4 CBD

4.1 Many perennial and non-perennial rivers; much cultivation; few dams so it is not necessary to store water.

4.2 The river has sandbanks, which indicates that it is flowing slowly; it is flowing on a gentle gradient; it is meandering, etc.

4.3 The river valley in Block A1 will be narrow and have steep sides, the gradient will be steep; the river valley in Block E5 will be wide and have gentle sides, the gradient will be gentle.

5.1 It is based on the 0° longitude and 180° meridian; it has zones 2° wide; shapes of small areas are true; meridians and parallels cross each other at right angles; it does not have equal-area properties.

5.2 Geographical Information System – a system for capturing, storing, manipulating, analysing and displaying data.

5.3 Raster data is stored as rectangular grid cells or pixels; vector data is stored as points, lines and polygon areas.

5.4 Spatial data gives location information, e.g. coordinates; attribute data is data that is additional to location, e.g. statistics about drought.

5.5 Remote sensing; global positioning systems, orthophotos, scanning of maps; research

5.6 Maps form the base layer of a GIS and indicate the location of the area about which data has been captured, analysed, etc.