Section II

40 marks Attempt Questions 21–24 Allow about 1 hour and 10 minutes for this section

Answer each question in the appropriate writing booklet. Extra writing booklets are available.

If you include diagrams in your answer, ensure that they are clearly labelled.

Question 21 (9 marks) Use the Question 21 writing booklet.

A state government is introducing new digital combined red light/speed cameras. These new cameras are very similar to existing speed and red light cameras, except that they use digital imaging technology and utilise different detection technologies such as road sensors as opposed to radar devices.

The digital camera works by taking a digital image of any vehicle that runs a red light and/or exceeds the speed limit. The image and information is then loaded directly into the infringement processing system.

(a)	Draw a context diagram to represent the new system.	2
(b)	What information technology is required by the new system?	2
(c)	The first digital camera will be installed in one location and if it proves to be successful, the new system will be rolled out across the state.	3
	Justify this method of converting from the existing system to the new system.	
(d)	Describe a social and/or ethical issue related to the digital red light/speed camera.	2

In your answer consider the position of either the owner/driver or the state government.