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INFORMATION TECHNOLOGY IN A GLOBAL SOCIETY
HIGHER LEVEL AND STANDARD LEVEL
PAPER 2

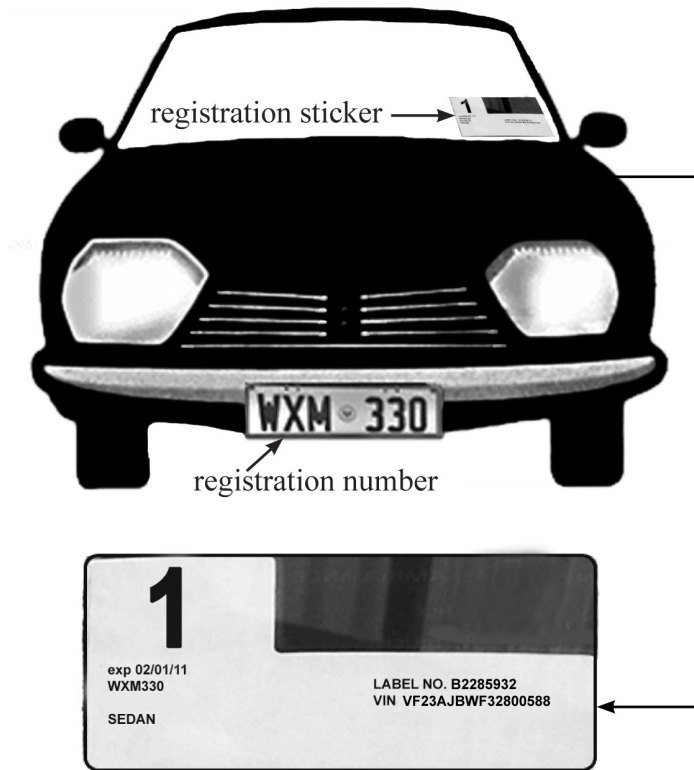Monday 7 May 2012 (morning)

1 hour 15 minutes

ARTICLE

INSTRUCTIONS TO CANDIDATES

- Do not open this booklet until instructed to do so.
- This booklet contains the article required for information technology in a global society higher level and standard level paper 2.

Topic: Politics and government

IT system: using hand-held computers, wireless network and central database

For many years car owners in the state of Western Australia had to purchase a registration sticker each year to register their car with the state Government. They were required to display this sticker on the windscreen of their car. It is illegal to drive an unregistered car. The car's registration number is included on the sticker.

registration sticker ⟶

registration number

1
exp 02/01/11
WXM330

LABEL NO. B2285932
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SEDAN

[Car image: from http://protechtor.com/index.htm, 1 October 2010]

Cutting-edge technology, used by West Australian police, has now made car registration
5   stickers obsolete. When car owners pay the annual registration fee, instead of receiving a registration sticker, their details are added to the car registration database and they just receive a receipt. They can check their car registration expiry date at any time on the state Government website at www.transport.wa.gov.au/licensing.

Previously, if police officers wanted to check if a car had the correct registration sticker, they had to
10 call the police headquarters on their car radio and give the car's registration number. They then waited while someone ran a search for that registration number using a computer in the police headquarters to link to the car registration database.

A police superintendent (senior police officer) commented: "Today the police officers just type
15   in a registration number on their hand-held computer and within seconds they will have all of the
information associated with that car and its owner."

An example of a hand-held computer used by police officers

[Motorola Solutions MC65 Mobile Computer. Used with permission.]

With the new technology, which is currently limited to the city areas, police officers can do over
six million searches per year.

As well as retrieving the expiry date of registration they can find out other information including the
car's owner, previous owners, registration status, and the engine number.
20

If the owner of the car has an unpaid driving fine, or is wanted by the police for some
other reason, this will also be highlighted on the system and the police officer will stop the driver.

The police officer said: "We can also do detailed searches on people, we can access the criminal
records of every person in Western Australia, we can bring up their photos."

As the hand-held computers have inbuilt global positioning, the police superintendent can
25   immediately find the location of any of the police officers by using an electronic mapping system.