Victorian Certificate of Education 2006

# General Achievement Test 

Wednesday 7 June 2006<br>Reading time: $\mathbf{1 0 . 0 0}$ am to 10.15 am ( $\mathbf{1 5}$ minutes) Writing time: $\mathbf{1 0 . 1 5}$ am to $\mathbf{1 . 1 5 ~ p m}$ ( $\mathbf{3}$ hours)

## QUESTION BOOK

Structure of book

| Type of <br> questions | Number of questions <br> to be answered | Suggested times <br> (minutes) | Suggested time <br> allocation |
| :--- | :---: | :---: | :---: |
| Writing Task 1 | 1 | 30 | $10.15-10.45$ |
| Writing Task 2 | 1 | 30 | $10.45-11.15$ |
| Multiple-choice questions | 70 | 120 | $11.15-1.15$ |

- Students are permitted to bring into the examination room: pens, pencils, highlighters, erasers, sharpeners, rulers, and an English and/or bilingual dictionary.
- Students are NOT permitted to bring into the examination room: blank sheets of paper and/or white out liquid/tape.
- No calculator is allowed in this examination.


## Materials supplied

- Question book of 40 pages.
- Answer sheet for multiple-choice questions.
- Script book for both Writing Task 1 and Writing Task 2.


## Instructions

- Write your student number on the script book.
- Check that your name and student number as printed on your answer sheet for multiple-choice questions are correct, and sign your name in the space provided to verify this.
- Follow the times suggested for each task.
- You may complete tasks in any order and you may return to any task at any time.
- Do not waste time on one particular multiple-choice question. If you find a question very difficult, return to it later.
- Answer all questions.
- All written responses must be in English.


## At the end of the test

- Place the answer sheet for multiple-choice questions inside the front cover of the script book.
- You may keep this question book.


## Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic devices into the examination room.

Consider the information on these two pages.
Develop a piece of writing presenting the main information in the material. You should not present an argument
Your piece will be judged on:

- how well you organise and present your understanding of the material,
- your ability to communicate the information effectively; and
- how clearly you express yourself.

| Chocolate Components | Potential Health Benefits/Problems |
| :---: | :---: |
| Epicatechin (antioxidant) | Protects blood vessels, promotes cardiac health |
| Gallic acid (antioxidant) | Protects blood vessels, promotes cardiac health |
| Tryptophan | Causes release of serotonin (brain chemical related to positive sense of wellbeing) |
| Theobromine | Mild stimulant similar to caffeine, with mild mood improving effects |
| Fat |  |
| Cholesterol | Can contribute to obesity and heart problems |
| Carbohydrates (including Sugar) |  |
| Vitamin A |  |
| Vitamin B |  |
| Zinc | to recommended daily intake |
| Magnesium |  |
| Iron |  |
| Calcium |  |



THE CACAO TREE Scientific name: Theobroma meaning 'Food of the Gods' Size: Each pod = size of average pineapple Number of cocoa beans: 30-50 in each pod Amount of chocolate produced per pod (approx.): 7 milk chocolate bars or 2 dark chocolate bars

## The cocoa bean in history.

400 BC-1520 AD: Mayan and Aztec civilisations used cocoa beans for unsweetened drinks 1521: The Spaniard Hernando Cortes conquered prized -1 rabbit +100 found cocoa beans highly 1560s: Spaniards added sugar to cocoa solids


## WRITING TASK 2

To be answered in the script book in pen, not pencil.
You are advised to allocate 30 minutes to this task.

Consider the statements below.
Based on one or more of the statements, develop a piece of writing presenting your point of view.

Your piece of writing will be judged on:

- the extent to which you develop your point of view in a reasonable and convincing way; and
- how effectively you express yourself.

The news media bring us a wide range of information from all over the globe. They play a vital role in letting us know what is happening in the world around us.

The news media do not just report the news, they create it. It's all about entertainment and selling the story, rather than reporting the facts.

The news media can use their influence to expose wrongs and to protect the rights of individuals who otherwise would not have a voice in our society.

The news media give an extreme and exaggerated view of the world, generally emphasising the worst that can happen.

## MULTIPLE-CHOICE QUESTIONS

## To be answered on the Answer Sheet for Multiple-Choice Questions.

You are advised to allocate $\mathbf{2}$ hours to this task.

Choose the response that is correct, or that best answers the question, and shade the square on the answer sheet for multiplechoice questions according to the instructions on that sheet.

A correct answer is worth 1 mark, an incorrect answer is worth 0 marks. No marks will be given if more than one answer is shown for any question. Marks will not be deducted for incorrect answers.

UNIT 1

## Question 1



The types of music presented in the cartoon represent the difference between
A the happy and the sad.
B the realistic and the unrealistic.
C the pleasant and the unpleasant.
D the simple and the complicated.

## UNIT 2

## Questions 2 and 3

Consider this rectangular board made of five smaller rectangular pieces. Lengths of some sides are given (in cm ).

- The given lengths are as stated, but assume the diagram is not drawn to scale.
- $p, q, r, s, t$ and $u$ are whole numbers.



## Question 2

What is the value of $s$ ?
A 2 cm
B 3 cm
C 4 cm
D There is insufficient information provided to answer this question.

## Question 3

If the area of the rectangle with sides $p$ and $q$ is 15 square centimetres, what is the value of $u$ ?
A 9 cm
B 10 cm
C 11 cm
D There is insufficient information provided to answer this question.

## UNIT 3

## Questions 4-7

Sue Monk Kidd, The Secret Life of Bees, Headline Book Publishing, 2002.


## Question 4

For Lily, working at the peach stand is best described as

A intense.
B tedious.
C fatiguing.
D strenuous.

## Question 5

In the passage, it is suggested that T. Ray's response to his daughter's interest in reading is based on his

A attitude towards females.
B fear of social embarrassment.
C frustrated educational ambitions.
D belief in the importance of hard work.

## Question 6

In the passage, Lily's attitude to her future career
A remains positive and unchanging.
B is dependent upon her father's approval.
C moves from simple acceptance to active optimism.
D changes from confident acceptance to nervous apprehension.

## Question 7

In the passage, it is suggested that the relationship between Lily and her father is one of mutual

A fear.
B respect.
C affection.
D contempt.

## UNIT 4

## Questions 8-10

At a local school, there are two honour boards giving the names of each year's best overall sports person in the junior school (years $7-9$ ) and senior school (years $10-12$ ).

Assume that:

- students do not repeat any year level;
- no two students have the same last name.

| Junior Champion |  | Senior Champion |  |
| :--- | :--- | :---: | :--- |
| 1995 | J. Smith | 1995 | T. Ardle |
| 1996 | D. Bloggs | 1996 | E. Gravinsky |
| 1997 | C. Xiang | 1997 | G. Nunn |
| 1998 | H. Mamoud | 1998 | C. Xiang |
| 1999 | H. Mamoud | 1999 | P. Little |
| 2000 | G. Jones | 2000 | J. Smith |
| 2001 | N. Nakamura | 2001 | H. Mamoud |
| 2002 | A. Faloa | 2002 | P. Love |
| 2003 | G. Boticelli | 2003 | G. Jones |
| 2004 | G. Boticelli | 2004 | N. Nakamura |

## Question 8

What year level could D. Bloggs have been in during 1996?
A 7 only
C 9 only
B 8 only
D any of 7,8 or 9

## Question 9

What year level could C. Xiang have been in during 1997?
A any of 7,8 or 9
C 8 only
B either 8 or 9 only
D 9 only

## Question 10

What year level could H. Mamoud have been in during 1998?
A any of 7, 8 or 9
C 7 only
B either 7 or 8 only
D 8 only

## UNIT 5

## Questions 11-14

Genetic testing makes it possible to determine whether a person has a genetic disorder or is predisposed to a particular disease. In the future, employers may seek the right to genetically test their potential employees.

The statements (Questions $11-14$ ) are from a debate about the topic that:

## Employers should have the right to genetically test potential employees.

For Questions 11 - 14 choose the alternative (A - D) that best describes the relationship of the statements to the debate topic above.

## The statement

A is most likely part of the argument for the topic.
B is most likely part of the argument against the topic.
C could possibly be part of the argument for or against the topic.
D is not relevant to either the argument for or against the topic.

## Question 11

To deny a person a job on the basis of a genetic test interferes with what we, as a society, have always accepted as fate.

## Question 12

There is a need to consider the benefits and the harms of genetic testing.

## Question 13

Genetic testing has provided us with many scientific advances.

## Question 14

Employers have a right to make decisions that best serve the interests of their organisation.

## UNIT 6

## Questions 15-17

The UV radiation that reaches the Earth from the Sun can cause skin cancer. The figure below indicates the intensity of UV radiation (milliwatt per square metre) in two Australian cities at two times of the year. The health risks associated with various intensities of UV radiation are also indicated (Low, Moderate, High or Extreme).


Local time of day

## Question 15

Of the following, when and where is the intensity of UV radiation greatest?
A Darwin, 12 noon, July
B Hobart, 2 p.m., January
C Darwin, 8 a.m., January
D Hobart, 12 noon, July

## Question 16

Which one of the following is the most appropriate advice for someone who wishes to totally avoid High and Extreme UV radiation in Darwin during the given month?

A In July, stay inside between 6 a.m. and 4 p.m.
B In July, stay inside between 10 a.m. and 2 p.m.
C In January, stay inside between 6 a.m. and noon.
D In January, stay inside between 11 a.m. and 1 p.m.

## Question 17

Which of the following is the best estimate of how many hours a day in January the intensity of UV radiation in Hobart is greater than that in Darwin?

A 0 hours
B 5 hours
C 7 hours
D 9 hours

## UNIT 7

## Questions 18-22

The following passage is taken from a commentary about urban legends, sometimes referred to as urban myths.

Our modern folklore is important in explaining the world around us. We name our fears by forming compelling tales out of them. That is why the content of most urban legends is invariably about the very things that frighten us most -cold-blooded killers, poison, disease, kidnappers, to name but a few. An urban legend is therefore most often a story about orderly everyday life, turned into a nightmare due to a bizarre set of circumstances. The most appealing feature of such a story is that the events depicted in it are perfectly plausible. Consider the following: there is nothing supernatural about a venomous little creature inside a piece of clothing. Clothes can now be imported from the most exotic countries. It is possible that a spider could sneak inside a shipment of clothing and travel across the world from Taiwan to Finland. Why couldn't it bite an unsuspecting patron selecting a pullover? This 'what if' element is the driving force behind every legend.

Urban legends are the folklore of the modern industrialised world and are much more universal than their medieval counterparts. The rapid flow of information and people from one country to another makes these legends spread at lightning speed around the world. They are the sum of all our subconscious fears, hopes and desires. Everything we find frightening, infuriating, or desirable soon finds its way into them. They travel orally or via the Internet throughout our society, changing their shape constantly. Although in every legend there is a relatively unchanging core, the local variations and subtypes of any given story are endless. There are as many versions as there are tellers, as the oral form makes 'standard' versions a sheer impossibility.

We take heed of the legends and we pass them on because we need other people to experience these feelings with us. We need other people to laugh at them and get shocked by them just the way we did when we first heard them. We want to know that other people can confirm the horror or shock that we feel.

## Question 18

The passage suggests that the "'what if' element" (line 12) explains
A the varied content of urban legends.
B how urban and medieval legends are different.
C the fascination that people have with urban legends.
D the disbelief people often have about urban legends.

## Question 19

According to the passage the reason urban legends keep spreading is because
A people are easily manipulated.
B they are educational and informative.
C the stories, while true, seem unbelievable.
D the stories, though untrue, appear credible.

## Question 20

In the passage, the urban legend about the spider (lines $10-13$ ) is presented as a
A believable scenario that is fictional.
B believable scenario that is based on fact.
C good example of how urban legends spread.
D ridiculous example of how people will believe anything.

## Question 21

According to the passage, 'standard' versions (line 23) of urban legends
A exist because they represent all humanity.
B exist because they are sent via the Internet.
C do not exist because individual people influence their content.
D do not exist because the core of each story has a different origin.

## Question 22

According to the passage, urban legends have a purpose. This is to
A evoke fear in people by exaggerating real events.
B give people a sense of security through sharing their fears.
C provide people with realistic and acceptable explanations of events.
D entertain people with highly improbable accounts of unusual events.

## UNIT 8

Questions 23-25
At mineral springs, hand pumps are used to bring the mineral water up from under the ground. In the European hand pump (Figure 1) the handle is moved up and down to lift and deliver the water. The handle rotates around a pivot and is connected to a rod that passes into the main cylinder of the pump. Figure 2 shows cross-sections of such a pump during successive down, up and down movements of the handle.


Figure 1


Figure 2

## Question 23

Water passes through the outlet pipe
A when the flapper valve is open and the cup is moving up only.
B when the flapper valve is closed and the cup is moving up only.
C when the flapper valve is open and the cup is moving either up or down.
D in none of the situations described in $\mathbf{A}, \mathbf{B}$ or $\mathbf{C}$.

## Question 24

If the flapper valve at the bottom of the main cylinder of the pump were unable to close properly, water would most likely

A not touch the leather cup piston.
B be emptied through the outlet pipe.
C be lifted into the main cylinder above the cup.
D move down out of the main cylinder when the piston moves down.

## Question 25

Suppose the amount of water coming from the outlet pipe reduces.
Which one of the following is least likely to cause this problem (i.e. reduce the amount of water coming from the outlet pipe)?

A a hole developing in the cup
B removal of the cover over the main cylinder
C failure of the flapper valve to close completely
D a poor contact between the piston and the wall of the main cylinder as the piston moves up

## UNIT 9

## Questions 26-28

Figure 1 below provides information about the production and style of six letters from the Roman alphabet. Handwritten letters are produced when a writing tool is pressed against a writing surface and lifted from it, in a continuous and predetermined sequence of movements. The path taken by the writing tool is called the 'ductus'.

In Figure 1 the ductus of each letter is represented by a thin line. The dot signifies the starting point in the formation of each letter, while the direction taken by the writing tool is indicated by arrows. The broken lines signify the path of the writing tool when not in contact with the writing surface.
Monumental
Capitals

(1st Century) Cursive (2nd Century) \begin{tabular}{c}
Uncial <br>
(5th Century)

 

Carolingian <br>
Minuscule <br>
(9th Century) <br>
(15thCentury) <br>
(16thrsive Century)
\end{tabular}

Figure 1: Styles of Letters

## Question 26

The total number of times the writing tool comes into contact with the writing surface during the formation of the Humanist Minuscule ' $g$ ' is
A 2 .
C 4 .
B 3 .
D 6 .

## Question 27

The broken lines in Figure 1

A represent the only way to make the letter.
B should be followed to achieve the desired style.
C indicate the beginnings and ends of straight lines.
D suggest an alternative path by which the letter can be formed.

## Question 28

Figure 1 suggests that, between the first and sixteenth centuries, the writing of Roman letters became

A more rigid.
B less precise.
C less flowing.
D more efficient.

