



basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

**NATIONAL
SENIOR CERTIFICATE**

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY

OPTIONAL SPEED/ACCURACY QUESTION

NOVEMBER 2012

MARKS: Not applicable

TIME: 5 minutes reading time PLUS 10 minutes keying-in time PLUS printing time

This question paper consists of 4 pages.

INSTRUCTIONS AND INFORMATION

1. Time: FIVE MINUTES will be allowed for READING the speed/accuracy text.
TEN MINUTES will be allowed for the KEYING IN of the text.

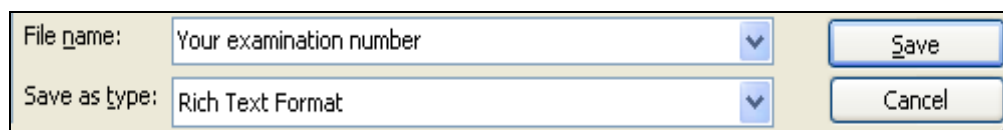
2. Default settings:

LANGUAGE	SA English or UK English
UNITS OF MEASUREMENT	Centimetres (cm)
JUSTIFICATION	Left
FONT AND FONT SIZE	Courier New 12 or Courier 12
MARGINS	2.54 cm
HEADER/FOOTER	1.27 cm
LINE SPACING	1½ (1.5 lines) or double-line spacing

3. Insert a header containing the following:

CAT Speed November 2012 (Left aligned)
Examination number (Right aligned)

4. Provision has been made for speeds up to 70 words per minute.
5. Insert an extra line space before the start of a new paragraph.
6. You may not edit your answer after the 10-minute keying-in time has elapsed.
7. Use your **examination number** as the file name to save your document. Save the file in Rich Text Format, as shown below. Make a printout of your answer and submit it to the invigilator. You may submit **only ONE printout of this question**.



File name: Your examination number

Save as type: Rich Text Format

Save Cancel

NOTE: Invigilators must ensure that all candidates' optional speed questions are saved to CD for the purpose of marking. Printouts must be handed in with the electronic copies on the CD.

Key in the following paragraphs as fast and as accurately as you can.

[Adapted from the article 'Acts of God' in the *British Airways Horizons* magazine, May 2011]

An earthquake is a movement of a fault between the plates that make up the Earth's crust. Strain builds up along the fault over time, causing the plates to deform slowly until the crust breaks.

Aftershocks are the surrounding rocks responding to the fracture. After a big earthquake, such as the magnitude nine one that hit Japan, there are likely to be more than a thousand aftershocks of varying magnitudes. Most will happen in the first week or two and then they will die off slowly with time.

Earthquakes cannot be predicted. Frequency depends on the area. In Japan, tremors are felt regularly, but the magnitude depends on how far the rocks move. The more the rocks move, the bigger the earthquake is and the longer it takes for the rocks to move that far again. Japan should not experience an earthquake of that magnitude again for the next thousand years. The problem is scientists only have around one hundred years of data to go on, so estimates are far from certain.

20 wpm

How destructive an earthquake is depends less on its size than its location. Magnitude six earthquakes happen almost every week and do not make the news. However, it was a magnitude six that caused the destruction in Christchurch, New Zealand, which was not built to withstand it. Magnitude eight and nine earthquakes, however, will generally be destructive, no matter where they occur.

Tsunamis are caused by the movement of the sea floor after an underwater earthquake. The movement creates a wave that travels toward the coast, like water sloshing in a bucket if the bucket is hit with a hammer. It needs a particular earthquake that has a vertical offset so that it shakes up the sea floor. The energy

from the quake is transferred to the ocean, causing a wave that gets bigger as it approaches the coast, as water is funnelled into a smaller area. Waves will radiate in all directions from an earthquake in the ocean, so any land around that point will be threatened. But where the earthquake is closer to the shore, the wave may travel, in one preferential direction, as with the tsunami that hit Indonesia.

Usually there will be about three waves, the second being the strongest. The problem is that people survive the first wave and then think they are fine.

Tsunamis move at a speed of around eight hundred kilometres an hour - the same speed as a commercial jumbo jet. Countries around the Pacific Ocean have developed a warning system that is triggered when seismic stations pick up the kind of underwater earthquake that might trigger a tsunami. There are also buoys in the Pacific and Indian Oceans for picking up unusual wave behaviour.

A volcano is a rupture in the Earth's crust caused by the tectonic plates either pushing together or pulling apart, or where the Earth's crust is thinned, such as in the East African Rift Valley. There are around one thousand five hundred volcanoes around the world, excluding those on the ocean floor. There are different types of eruptions. The most dangerous ones are where the volcano erupts solid material, not lava. Solid material moves faster and the surrounding countryside gets enveloped in hot ash.

Active volcanoes around the world are monitored. Warnings would be issued if one was showing signs of instability, but how long you would have to leave before the eruption depends on the situation and how seriously you take the warnings. Some dangerous volcanoes erupt every three years.

END