basic education

Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

NATIONAL SENIOR CERTIFICATE

GRADE 12

COMPUTER APPLICATIONS TECHNOLOGY

OPTIONAL SPEED/ACCURACY QUESTION

NOVEMBER 2012

MEMORANDUM AND SPEED COUNT

MARKS: Not applicable

This memorandum consists of 5 pages.

OPTIONAL QUESTION: SPEED/ACCURACY

The maximum key depressions for this question = 3 500 depressions for 70 wpm in 10 minutes.

It is strongly recommended that the Edutrap Speed Marking software be used to mark the Speed/Accuracy question.

Where the Edutrap Speed Marking software is not used, the information below must be used.

To determine the speed, mark according to the following mark schedule:

The same example is on page 36 of the *Subject Assessment Guidelines* (January 2008):

Number of key depressions in ten minutes	= 2 125
Gross number of words (number of key depressions, divided by 5) (5 depressions = one word)	= 2 125 ÷ 5 = 425
Less number of words with errors (e.g. 7 words with errors)	= -7 from 425
Equals number of words without errors	= 418
Divided by the time (ten minutes)	= ÷ 10
Equals net number of correct words per minute	= 41,8 wpm

<u>Additional notes:</u>

If any words are omitted or inserted, then every 5 depressions of the omission or insertion counts as one word, e.g. if the following words were omitted it would be counted as:

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The |quick| brow|n fox| jump|s
  1 |   2  |   3 |  4  |   5  |words
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A capital letter counts as two depressions.

NOTE: The optional speed/accuracy question should only be marked in cases where the candidate could reach 20 wpm or more (1 000 depressions or more).

CONTENT	Upper case/ line spaces	Depressions	Total depressions
An earthquake is a movement of a fault between the plates that	1	63	64
make up the Earth's crust. Strain builds up along the fault	2	61	127
over time, causing the plates to deform slowly until the crust		63	190
breaks.		7	197
	2		199
Aftershocks are the surrounding rocks responding to the	1	56	256
fracture. After a big earthquake, such as the magnitude nine	1	62	319
one that hit Japan, there are likely to be more than a	1	55	375
thousand aftershocks of varying magnitudes. Most will happen	1	62	438
in the first week or two and then they will die off slowly		59	497
with time.		10	507
	2		509
Earthquakes cannot be predicted. Frequency depends on the	2	59	570
area. In Japan, tremors are felt regularly, but the magnitude	2	63	635
depends on how far the rocks move. The more the rocks move,	1	61	697
the bigger the earthquake is and the longer it takes for the		61	758
rocks to move that far again. Japan should not experience an	1	62	821
earthquake of that magnitude again for the next thousand		57	878
years. The problem is scientists only have around one hundred	1	63	942
years of data to go on, so estimates are far from certain.		58	1000
20 wpm	2		1002
How destructive an earthquake is depends less on its size than	1	63	1066
its location. Magnitude six earthquakes happen almost every	1	61	1128
week and do not make the news. However, it was a magnitude	1	60	1189
six that caused the destruction in Christchurch, New Zealand,	3	62	1254
which was not built to withstand it. Magnitude eight and nine	1	63	1318
earthquakes, however, will generally be destructive, no matter		63	1381
where they occur.		17	1398
	2		1400
Tsunamis are caused by the movement of the sea floor after an	1	62	1463
underwater earthquake. The movement creates a wave that	1	57	1521

CONTENT	Upper case/ line spaces	Depressions	Total depressions
travels toward the coast, like water sloshing in a bucket if		61	1582
the bucket is hit with a hammer. It needs a particular	1	56	1639
earthquake that has a vertical offset so that it shakes up the		63	1702
sea floor. The energy from the quake is transferred to the	1	60	1763
ocean, causing a wave that gets bigger as it approaches the		60	1823
coast, as water is funnelled into a smaller area. Waves will	1	62	1886
radiate in all directions from an earthquake in the ocean, so		62	1948
any land around that point will be threatened. But where the	1	62	2011
earthquake is closer to the shore, the wave may travel, in one		63	2074
preferential direction as, with the tsunami that hit		53	2127
Indonesia.	1	10	2138
	2		2140
Usually there will be about three waves, the second being the	1	62	2203
strongest. The problem is that people survive the first wave	1	62	2266
and then think they are fine.		29	2295
	2		2297
Tsunamis move at a speed of around eight hundred kilometres an	1	63	2361
hour – the same speed as a commercial jumbo jet. Countries	1	60	2422
around the Pacific Ocean have developed a warning system that	2	62	2486
is triggered when seismic stations pick up the kind of		55	2541
underwater earthquake that might trigger a tsunami. There are	1	63	2605
also buoys in the Pacific and Indian Oceans for picking up	3	59	2667
unusual wave behaviour.		23	2690
	2		2692
A volcano is a rupture in the Earth's crust caused by the	2	58	2752
tectonic plates either pushing together or pulling apart, or		61	2813
where the Earth's crust is thinned, such as in the East	2	56	2871
African Rift Valley. There are around one thousand five	4	57	2932
hundred volcanoes around the world, excluding those on the		59	2991
ocean floor. There are different types of eruptions. The	2	59	3052
most dangerous ones are where the volcano erupts solid		55	3107
material, not lava. Solid material moves faster and the	1	57	3165

CONTENT	Upper case/ line spaces	Depressions	Total depressions
surrounding countryside gets enveloped in hot ash.		50	3215
	2		3217
Active volcanoes around the world are monitored. Warnings	2	59	3278
would be issued if one was showing signs of instability, but		61	3339
how long you would have to leave before the eruption depends		61	3400
on the situation and how seriously you take the warnings.		59	3459
Some dangerous volcanoes erupt every three years.	1	49	3509