QUESTION PAPER 2011

INSTRUCTIONS TO THE CANDIDATES

1. All answers must be typed or pasted on the answer sheet provided in the document AnswerSheet.doc

2. You may do the questions in any order, but you have to make sure the answers are placed correctly on the answer sheet.

3. The files you need to answer the questions have been provided to your school on CD. Ask your teacher/invigilator where to find them.

4. The paper must be completed under "examination conditions". No communication with other contestants (oral, electronic, or any form) is permitted.

5. You may use the application of your choice and convert the data as it suits you.

6. You have 1.5 hours (90 min.) to complete this paper. After 1.5 hours you will be given time to print your answer sheet, but no additions or alterations to the answers are allowed.

7. All marking is done from hard copy, i.e. from the printed answer sheet.

8. Each correct answer counts one mark.

9. You need to store your files where you found them and where your teacher can access them in case the judges want to see how you obtained the answer. Do not delete any of the files.

CENSUS

As this is the year of a census in South Africa, the paper is based on census data and data collection.

A. INTERPRETING DATA

Use the document "New Zealand Data" to answer the following:

1. How many pages does the document contain?
2. The document includes a number of tables; how many?
3. How many footnotes does the document contain?
4. What is the width of table 5? (In cm)
5. The word "competitiveness" only appears once in the document. On which page does it appear?
6. In the Reference section, the 2nd entry ("Bell...") has a different size for the hanging indent. What is the size (in cm) of the hanging indent for this particular paragraph?
7. Which country is mentioned in the footnote numbered 7?
8. Copy the heading, which has been bookmarked as 'CopyMe', to your answer sheet.
9. How many times does the word "paid" appear in the document?
10. In Table 1 what is the average of the last column (to one decimal)?
11 Still using Table 1, name the country that is closest to all three averages.

B. EXTRACTING INFORMATION

When a country holds a census they often run a census amongst school children as well.

You have been given a spreadsheet called 'Census at School' which has the results of a survey done amongst a group of children. Use the data to answer the following questions.

1. How many children participated in the survey?
2. Of those surveyed, how many were girls?
3. How many of those who were surveyed were only left-handed?
4. What is the height of the shortest boy? (In cm)
5. How many boys spend more than 1 hour travelling to school?
6. What is the reaction time of the tallest boy?
7. What is the ID number of the child who believes he/she is excellent at all 5 activities?
8. How many children have all of these: TV, MP3 player, Internet, Facebook and a cellphone?
9. Which superpower is the most popular?
10. Some children get technology early. How many children had a phone <u>before</u> they turned 7 years old?
11. Sleep is important. How many children sleep for 11 or more hours a night?
12. In which of the 5 activities do learners believe they have the least ability?

C. TEN YEARS AGO

The database CensusData contains a sample of data taken in a school-based census in 2001. The data is stored in a number of tables. Use the data to answer the following questions.   (In the tables 1 = yes and 0 = no)

1. How many records are stored in the Master table?
2. How many boys' records are there in the Master table?
3. What is the average height of the girls? (In centimetres, correct to 1 decimal place)
4. How many learners have access to either a radio, a television or a computer at home?
5. How many learners have access to a radio and television and a computer at home?
6. How many learners live in the Eastern Cape?
7. How many girls live in Gauteng?
8. How many grade 1 to 7 boys in the Northern Cape walk to school?
9. What percentage of the boys has their own mobile phone (correct to two decimal places)? (Remember this was 2001)
10. What is the most common foot length (in centimetres)?

D. SCHOLARSHIP

An organisation wants to give one child a scholarship. Each child wrote a test, created a project and did an oral exam. The raw scores are in "Census at School" in the sheet "Marks". To find the winner, the marks must be combined as follows: the test and oral marks are doubled and these are added to half the project mark. The child with the highest total wins the scholarship.

1. What is the highest total?
2. How old is the child who receives this scholarship? (give the age up to one decimal of a year)

[1 mark for each correct answer: 35 marks]