NATIONAL ASSEMBLY

FOR WRITTEN REPLY

QUESTION 401

DATE OF PUBLICATION OF INTERNAL QUESTION PAPER: 15/03/2013

(INTERNAL QUESTION PAPER: 08/2013)

Mr P F Smith (IFP) to ask the Minister of Basic Education:

Whether she has found that a question that appeared on the 2012 grade 12 Mathematical Literacy paper to which learners had to confirm whether Christmas Day is on 25 December in South Africa serves any mathematical purpose; if so, what are the relevant details? NW435E

RESPONSE:

The question reads as follows: State whether the following event is certain, most likely or impossible: Christmas day is on December 25 in South Africa.

The question assesses the concept of 'probability and therefore serves a Mathematical purpose. The Mathematical Literacy Subject Assessment guidelines, which serves as the framework for the design of this question paper requires learners to be able to use probability in making predictions of outcomes in real life situations (and in the context of games). Learners are also required to express probability values in different ways, in words or numerically as fractions, ratios or percentages.

In the case of the said question, it was required that the probability of the event be expressed in words such as certain, impossible or most likely. The event chosen in this question, namely "Christmas Day is on 25 December in South Africa" is a true statement in the context provided

and the probability is 100% or 1 or can be expressed in words such as "certain". Note that the question, is not establishing whether learners know the date on which Christmas occurs, but rather it assesses the candidates' understanding of simple probability concepts as prescribed for Mathematical Literacy. This question is also relevant when it is considered that Christmas day is not universally celebrated on the 25 December by all communities (for example the Russian Orthodox Church celebrates Christmas day on another date).

In addition, it needs to be noted that every question paper is structured to cater for low, medium and higher order questions. This specific question is a lower order question carrying two (2) marks and there are other questions that are pitched at the medium and higher order levels. In both these papers, i.e. Paper 1 and Paper 2, candidates were required to answer questions on financial maths, interpret relationships both in the form of formulae and of graphs, calculate perimeter, area and volume, and read maps and plans, which confirms the scope and depth of Mathematical Literacy..