

ITEM TWO

The ICT department of a secondary school is tasked with improving student performance in the subject. To achieve this, the department analyses the end-of-term examination scores, which were recorded out of 100 as follows: 50, 62, 64, 68, 70, 70, 72, 75, 80, 90, 91, and 98.

Based on this data, the department sets criteria to guide academic improvement decisions. If the mean score is greater than 69.32%, they will introduce smart boards to enhance teaching and learning across the school. If the difference between the mode and the median is less than five, they will introduce weekly tests and provide corrections to improve student understanding. If the range of the scores is less than 50%, they will recommend the recruitment of an additional ICT teacher to support learners.

At the same time, the academic office is reviewing the overall performance of Senior Four students to support broader academic planning and resource allocation. The Director of Studies collects performance data from two streams: one stream has 30 students with a mean score of 27 and a standard deviation of 5.6, while the other stream has 40 students with a mean score of 33 and a standard deviation of 6.4. The academic committee aims to determine the combined performance of all 70 students in order to evaluate the effectiveness of recently introduced teaching strategies and to guide further improvements.

Furthermore, the academic committee plans to recruit UNEB specialists to support both teachers and students if the standard deviation of the combined group of 70 students is found to be less than 31, as this would indicate a need for more specialized guidance to improve overall academic outcomes.

Tasks

- a) Will the management introduce smart boards for the whole school? Explain your answer.
- b) Will the management give weekly tests and make corrections for a few questions? Justify your recommendation.
- c) Should the management recruit an additional ICT teacher? Give a reason.
- d) Should the school hire UNEB specialists to facilitate the students? Explain your answer.