

Candidates are still losing marks unnecessarily by not doing the following:

1. Starting the calculation with the correct equation
2. Supplying the correct unit in the final answer
3. Showing substitution into the correct equation

A detailed analysis of the questions follows.

QUESTION 1

Well answered.

QUESTION 2

Well answered.

QUESTION 3

Candidates had difficulty correcting the FALSE statements. Teachers should pay more attention to this type of question.

QUESTION 4

Well answered.

QUESTION 5

5.1 Well answered.

5.2 Poorly answered especially questions based on LO3. Candidates could not relate explanation to principles in physics.

5.3 Very poorly answered

QUESTION 6

This question was well-answered.

QUESTION 7

7.1 Well answered.

7.2 Mechanical energy is the sum of $E_p + E_k$
Conservation of mechanical energy is therefore: $E_p + E_k = \text{constant}$
Many candidates simplified, writing $E_p \text{ top} = E_k \text{ bottom}$,
Instead of $(E_p + E_k)_{\text{top}} = (E_p + E_k)_{\text{bottom}}$

7.3 Well answered.

7.4 Well answered.

QUESTION 8

8.1 Well answered.

8.2 Very poorly answered.

Candidates lost marks for not being able to identify f_s and f_L correctly.

QUESTION 9

New content. This section of the work was well answered.

Candidates should be made aware of the differences and similarities between the interference and diffraction patterns.

QUESTION 10

Many candidates had difficulty in defining an electric field.

They also struggled with the calculation, which involved more than one calculation.

QUESTION 11

The candidates had difficulty describing patterns and trends on the given graph. This skill must be developed.

QUESTION 12

Very poorly answered.

Many candidates struggled with the concept of internal resistance. They should be encouraged to solve problems involving more than one calculation. The emphasis was placed on designing a problem-solving strategy to help them solve the problem. This skill was severely lacking throughout the paper.

QUESTION 13

This section of the work was well taught and well answered.

QUESTION 14

14.1 The majority of the candidates were able to answer this question.

14.2 The candidates' did not always display the ability to reason.

14.3 LO3-type question.

Candidates could not relate explanation to principles in physics

QUESTION 15

The majority of the candidates were able to answer this question, but many failed to make a comparison.