

25.1 PAPER 1 (451/1)

Question 2

Distinguish between a compiler and an interpreter. (2 marks)

Candidates were required to distinguish between a compiler and an interpreter.

Weaknesses

Candidates just defined the two terms. They did not show the differences between the two as demanded by the question. Teachers should point out clearly the differences between the two. Where necessary, similarities should also be included.

Expected Responses

A compiler translates the entire program at once as a unit before execution can begin while an interpreter translates one instruction of the source code at a time which is immediately obeyed before the next instruction can be translated.

Question 3

Explain why computers use binary numbers in data representation. (2 marks)

In this question, the candidates were required to explain why in data representation, computers use binary numbers.

Weaknesses

Many candidates could only state that binary numbers (Machine code) is inform of 0's and 1's but could not relate this fact to the bi-state nature of computers.

The weakness stated above shows that the topic is not well understood which would imply poor tuition. It is emphasized that all topics will be examined and therefore each one should be given a thorough coverage.

Reasons for use of binary numbers as opposed to any other number system should be clearly brought out. In our case, it is the bi-state nature of computers that resulted in the use of binary digits and not vice-versa.

Expected Responses

Binary number system has only two digits which makes it suitable for representing the bi-state data in a computer such as on/off.