

#### Question 4

- (a) What do you understand by;
- (i) Micro-climate? (2 marks)
  - (ii) Green house effect? (2 marks)
- (b) Name **three** instruments to match three elements of weather that can be measured at a school weather station. (3 marks)

Candidates were required to provide definitions of terms 'micro-climate' and 'green house effect'. They were then expected to display knowledge of the instruments used for recording elements of weather and the element that each instrument records.

#### Weaknesses

Part (a) of the question was poorly answered. Candidates displayed ignorance of what micro-climate and green house effect mean. In part (b) they were able to get three instruments correctly matched with the weather element they record, except for a few who mixed up the instruments and weather elements.

#### Expected Responses

- a)
- i) Micro – climate  
  
This is climatic conditions in a restricted area due to small difference eg. aspect, slope, vegetation and human landscapes.
  - ii) Green house effect  
  
It is a condition where the in-coming solar radiation pass through the atmosphere while the outgoing terrestrial radiation are blocked by the clouds/atmosphere making the earth retain most of the terrestrial radiation. This makes the earth to be warmer than it would have been. It is a condition where the atmosphere balances the incoming and out-going terrestrial radiation making the earth to retain optimum heat.
- b) Three instruments to match three elements of weather that can be measured at a school weather station.

	<i>Instrument</i>	<i>Element</i>
i.	Rain gauge	Rainfall
ii.	Thermometer	Temperature
iii.	Barometer	Pressure
iv.	Hygrometer	Humidity