Candidate 4

Total marks awarded – 19/30

Research methods (gathering techniques 1 and 2)	6
Reference to/use of processed information	3
Knowledge and understanding	4
Analysing information	3
Conclusions	1
Communicating information	2

Soils Investigation

Page 1

The first T1 mark is awarded at '50 interval' for the candidate's explanation of systematic sampling (because in this case, this is a generic point applying to all research methods, this mark may be allocated to the first or second technique – wherever the candidate scores lower to best benefit the candidate) **(1 mark)**.

Methodology: A T1 mark is awarded at 'none of the moisture was lost' for a detailed description of the technique **(1 mark)**. A second T1 mark is awarded at 'no longer decreasing' for further development of this technique **(1 mark)**.

Methodology 2: A T2 mark is awarded at 'it is neutral' for explanation of the soil moisture technique **(1 mark)** and a second T2 mark is awarded at 'indication of the pH' for further development of this **(1 mark)**.

Page 2

PH: A KU mark is awarded at 'lignin rich plants' for the candidate's explanation linking temperature to plant type **(1 mark)**. A second KU mark is awarded at 'acidity in the soils' for further development of this **(1 mark)**. A PI mark is awarded at 'from 4 to site 5', (although the word 'decreasing' is underlined as the candidate means increasing) for two trends with no data from the PI sheets **(1 mark)**. A first AN mark is awarded at 'affected my results' for the candidate's explanation of this anomaly linked to farming **(1 mark)**.

Moisture: A KU mark is awarded at 'more frequent and heavier' for (albeit poorly expressed) explanation **(1 mark)**. A carat is placed at '7 had the lowest' for one trend with no development or data. An AN mark is awarded at 'ran off these slopes into it' for an explanation of the anomaly **(1 mark)**. A carat is placed at 'higher number of plants' as part of the sentence is reversal, and although the idea of plants is new, there is not enough here for a developed point. An AN mark is awarded at 'flooding affecting the moisture of the area' as explanation for the higher reading **(1 mark)**.

Air temperature: although this paragraph is not directly related to the title, the candidate makes a link in the next paragraph so a KU mark is awarded at 'making the area underneath cooler' **(1 mark)**.

Soil temperature: A PI mark is awarded at 'from site 6' at the foot of the page for a description of a trend with an example of an anomaly **(1 mark)**.

Page 3
Soil depth: No marks are awarded here as the candidate is confusing soil depth with horizons.

Carbon: The candidate appears confused by the theory here. Site 1 at the end of the fourth line is underlined as this is incorrect (it is site 2). A carat was placed at 'it had the best trend' and another carat is placed at 'slight anomaly', another trend with no data. A PI mark is awarded here at 'slight anomaly' for two trends with no data **(1 mark)**. A carat is placed at 'soil nutrients' on the second last line as there is not enough development here, and 'higher temperatures' on this line is underlined as the soil temperature at site 6 is the same as site 5. The candidate is attempting to explain an anomaly (site 5) by choosing to explain why another (site 6) fits the pattern.

Evaluation: A T2 mark is awarded at 'accurate pH' for an evaluation of measuring pH accurately **(1 mark)**. This illustrates that candidates will gain marks wherever they make a point, even if it is in a different section.

Page 4
A Con mark is awarded at 'relate to each other' for an attempt at summarising the overall findings **(1 mark)**.

Two marks were awarded overall for communicating information **(2 marks)**.
There is a clear structure and appropriate terminology.