UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Ordinary Level

MARK SCHEME for the October/November 2009 question paper for the guidance of teachers

5038 AGRICULTURE

5038/03 Paper 3 (Written Paper), maximum raw mark 30

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

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1 (a) (i) labelled petal and sepal
correctly labelled anther, filament, stamen
mark for recognisable drawing where parts are clearly identifiable, no need to be artis
[max

(ii) correctly labelled stigma, style and ovules
mark for recognisable drawing [max 3]

(iii) colour, smell, target shape, the presence of nectar (any two) [2]

(b) (i) root, stem, leaf or flower or other obvious parts clearly labelled
(two labelled = 1 mark, three labelled = 2 marks)
recognisable drawing of the parts [max 3]

(ii) exposed anther / stigma OWTTE
accept reasons explained or a description [2]

[Total: 14]

2 (i) mark for completed chart showing a rising pattern
AS4 should be slightly higher [1]
AS3 should be slightly lower [1]
where data plotted correctly accept reverse answers when most candidates have the same pattern

(ii) **AS4 (**accept **AS3** if most candidates results are showing the same) [1]

(iii) (correct graph as plotted from candidate data)
X and Y axis labelled appropriately (1 mark for each correct)
AS3 and **AS4** plotted as per table (1 mark for each) [max 4]

(iv) surface is air temperature / variable / direct heat [1]

(v) different water content of soils could affect results because of evaporation [1]

(vi) repeat / greater depth of soil / longer time / exactly the same moisture levels OWTTE [1]

[Total: 10]

3 (i) dark and organic – AS7
clay – AS6
coarse sandy soil – AS5 [3]

(ii) leached freely – AS5
absorbs Sun's energy – AS7
adding lime may improve – AS6 [3]

[Total: 6]