

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

<b>5038/03</b>	<b>5038 AGRICULTURE</b> Paper 3 (Written Paper), maximum raw mark 30
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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.

- CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the October/November 2009 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme: Teachers' version	Syllabus	Paper
	GCE O LEVEL – October/November 2009	5038	03

- 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 artistic [max 4]
- (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]**