

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

MARK SCHEME for the October/November 2008 question paper

0600/02

0600 AGRICULTURE

Paper 2 (Core Theory), maximum raw mark 80

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.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

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

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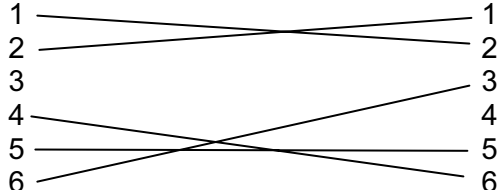
Page 2	Mark Scheme	Syllabus	Paper
	IGCSE – October/November 2008	0600	02

- 1 (a) (i) eggs / milk; [1]
- (ii) dung / animal manure / fertiliser / power / wool / fibre / feathers; [1]
- (b) cattle is the most popular meat;
buffalo most eaten in Asia;
equines similar everywhere;
camelids only popular in Africa; [max 3]
- (c) (i) fish / rabbit / poultry; A pig with valid reason [1]
- (ii) rapid growth rate;
short life cycle, quick turn around; A lack of fat [2]
- [Total: 8]**
- 2 (a) (i) wind; A physical for 1 mark
freeze thaw;
rain / rivers;
chemical; [4]
- (ii) roots penetrate;
dead / organic matter forms humus; A ion exchange [2]
- (b) (i) water; air; [2]
- (ii) more humus / organic matter;
more living things; A air [1]
- (c) distilled water / barium sulphate / universal indicator (BDH) /
shake and leave / compare colour with chart; [max 3]
- [Total: 13]**
- 3 (a) light from sun; a gas called carbon dioxide
water from soil; a gas called oxygen [4]
- (b) (i) less photosynthesis due to less light; R no photosynthesis
- (ii) less transpiration due to less heat; [2]
- to gain a mark in both (i) and (ii) an explanation must be given
- (c) appropriate pest for named crop; (1)
appropriate control named; detail given; (2) [3]
- [Total: 9]**

Page 3	Mark Scheme	Syllabus	Paper
	IGCSE – October/November 2008	0600	02

- 4 (a) (i) shape of leaves / size of flowers / shape of tubers / plant decumbent rather than erect / tubers grow from runner rather than terminal / roots on tuber (and) runner in sweet potato; R size reference [max 2]
- (ii) idea of fission rather than fusion; identical offspring / no variation; A reference to only one parent [2]
- (iii) idea of tubers separating; each then grows new plants; [2]
- (b) damp / wet / rain; warm / humid; [2]
- (c) aids leaf growth; protein building; A increase plant growth [2]

[Total: 10]

- 5 (a)  5 correct = 4 marks
4 correct = 3 marks
3 correct = 2 marks
2 correct = 1 mark
1 correct = 0 [4]

- (b) sunflower cake / maize meal; [1]
- (c) ration containing all food requirements; ratio related to demands of animal; [2]

[Total: 7]

- 6 (a) toxic fumes / do not breathe in; A cover up nose and mouth
toxic to water life e.g. fish / do not let into water courses;
danger to skin / wash hands after use; [3]
- (b) (i) spray will wash off before absorption;
- (ii) spray gets elsewhere / damage other crops / waste; R blown away unless qualified [2]
- (c) appropriate weed; spreads by runners / stolons or seeds in wind; OWTTE [2]

[Total: 7]

Page 4	Mark Scheme	Syllabus	Paper
	IGCSE – October/November 2008	0600	02

- 7 (a) (i) white because all chicks are white; [1]
- (ii) DNA / genes / chromosomes / sperm and egg; [1]
- (iii) a a A A 1 mark for gametes
 1 mark for F₁
 Aa Aa Aa Aa allow ecf [2]
- (b) rapid growth; A resistance to disease
 good conformation;
 breed characteristics; [3]

[Total: 7]

- 8 (a) (i) advantage: free, plenty of space / range for food / cost if qualified i.e. wire or fencing need
 less chance of catching disease / parasitic worms;
 A carry out natural behaviour
 disadvantage: eggs not collected / predators / can harm neighbours' garden plots / theft easy; [2]
- (ii) rests grass / grass can regrow;
 controls diseases / pests from land e.g. worms; [2]
- (b) concrete floor for cleaning;
 block wall prevent wind; gutter to prevent water into run;
 iron roof for durability / less likely to catch fire; etc. [3]
- (c) isolated / feathers ruffled / pale comb / smelly green droppings / low egg production / loss of weight / blood in droppings / sneezing or running nose / drooping head; [max 2]
- (d) $\frac{10,000 \times 4}{200} = 200$; [1]

[Total: 10]

- 9 (a) saw / hammer / spade / auger / hacksaw / mattock / spirit level; [max 4]
- (b) (i) tins recycled / noise if disturbed; [1]
- (ii) using valuable wood resources / vulnerable to termites; [1]
- (c) cost of fence related to added income;
 which enterprise makes most income;
 which enterprise most at risk without fence;
 goats fenced in involves more food and labour costs; [max 3]

[Total: 9]