WWW. Pal

## UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

**International General Certificate of Secondary Education** 

## MARK SCHEME for the October/November 2008 question paper

## 0600 AGRICULTURE

0600/02

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.

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

CIE is publishing the mark schemes for the October/November 2008 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

hbridge com

| <b>D</b> - |     |                                                                                                          | ı       |                                           |                      |                              |                  |          |                   |               |   |
|------------|-----|----------------------------------------------------------------------------------------------------------|---------|-------------------------------------------|----------------------|------------------------------|------------------|----------|-------------------|---------------|---|
| Page 2     |     |                                                                                                          |         | Mark Scheme IGCSE – October/November 2008 |                      |                              |                  |          | Syllabus<br>0600  | S. Pr         |   |
| 1          | (a) | (i)                                                                                                      | eaas    | s / milk;                                 | 363E - U(            | ,tonet/idove                 | IIIDEI ZUUÖ      |          | 0000              | Dapa Cambridg |   |
| •          | ()  | • •                                                                                                      |         |                                           | manure /             | fertiliser / nov             | ver / wool / fib | nre / fe | athers:           | Orio          |   |
|            |     | (,                                                                                                       | dang    | , r arminai                               | manaror              | orumoor / pov                | VOI / WOOI / III | 510710   | attiolo,          |               | 0 |
|            | (b) |                                                                                                          |         | the most prost prost prost eater          | popular me           | eat;                         |                  |          |                   | `             |   |
|            |     | equ                                                                                                      | ines s  | similar ev                                | erywhere;            |                              |                  |          |                   |               |   |
|            |     | can                                                                                                      | nelids  | only pop                                  | oular in Afri        | ca;                          |                  |          |                   | [max 3]       |   |
|            | (c) | (i)                                                                                                      | fish /  | / rabbit / p                              | ooultry;             |                              |                  | A pig    | with valid reason | [1]           |   |
|            |     | (ii)                                                                                                     |         | d growth i                                |                      |                              |                  | A loo    | l, af fat         | [0]           |   |
|            |     |                                                                                                          | snor    | т ше суск                                 | e, quick tur         | n around;                    |                  | Alac     | k of fat          | [2]           |   |
|            |     |                                                                                                          |         |                                           |                      |                              |                  |          |                   | [Total: 8]    |   |
| 2          | (a) | (i)                                                                                                      | wind    |                                           |                      |                              |                  | A phy    | sical for 1 mark  |               |   |
|            |     |                                                                                                          | rain ,  | ze thaw;<br>/ rivers;                     |                      |                              |                  |          |                   |               |   |
|            |     |                                                                                                          | chen    | nical;                                    |                      |                              |                  |          |                   | [4]           |   |
|            |     | (ii)                                                                                                     |         | s penetra<br>d / organi                   |                      | rms humus;                   |                  | A ion    | exchange          | [2]           |   |
|            |     |                                                                                                          |         |                                           |                      |                              |                  |          | -                 |               |   |
|            | (b) | (i)                                                                                                      | wate    | er; air;                                  |                      |                              |                  |          |                   | [2]           |   |
|            |     | (ii)                                                                                                     |         | e humus <i>i</i><br>e living th           | / organic m<br>ings: | atter;                       |                  | A air    |                   | [1]           |   |
|            |     |                                                                                                          |         | <b>.9</b>                                 | 9-,                  |                              |                  |          |                   | [-]           |   |
|            | (c) | (c) distilled water / barium sulphate / universal indicates shake and leave / compare colour with chart; |         |                                           |                      |                              |                  | BDH) /   |                   | [max 3]       |   |
|            |     | Sila                                                                                                     | iko ari | id icave /                                | compare              | ologi with ci                | iai t,           |          |                   | [max o]       |   |
|            |     |                                                                                                          |         |                                           |                      |                              |                  |          |                   | [Total: 13]   |   |
| 3          | (a) | ligh <sup>.</sup>                                                                                        | t from  | n sun;                                    | a gas call           | ed carbon di                 | oxide            |          |                   |               |   |
|            | ` , |                                                                                                          |         | m soil;                                   | _                    | ed oxygen                    |                  |          |                   | [4]           |   |
|            | (b) | (i)                                                                                                      | less    | photosyr                                  | nthesis due          | to less light;               |                  | R no     | photosynthsis     |               |   |
|            |     | (ii)                                                                                                     | less    | transpira                                 | tion due to          | less heat;                   |                  |          |                   | [2]           |   |
|            |     | ( )                                                                                                      |         |                                           |                      |                              | explanation m    | nust he  | aiven             |               |   |
|            |     | to gain a mark in both (i) and (ii) an explanation must be given                                         |         |                                           |                      |                              |                  |          |                   |               |   |
|            | (c) |                                                                                                          |         |                                           | or named o           | crop; (1)<br>letail given; ( | 2)               |          |                   | [3]           |   |
|            |     | чρр                                                                                                      | Opile   | ALC COTTUC                                | n nameu, C           | iotali giveri, (             | <del>-</del> )   |          |                   |               |   |
|            |     |                                                                                                          |         |                                           |                      |                              |                  |          |                   | [Total: 9]    |   |

| Page 3 | Mark Scheme                   | Syllabus | . Po er |
|--------|-------------------------------|----------|---------|
|        | IGCSE – October/November 2008 | 0600     | Do.     |

4 (a) (i) shape of leaves / size of flowers / shape of tubers / plant decumbent rather that tubers grow from runner rather than terminal / R size reference roots on tuber (and) runner in sweet potato;

(ii) idea of fission rather than fusion; identical offspring / no variation;

A reference to only one parent

(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]

[4]

(b) sunflower cake / maize meal;

[1]

(c) ration containing all food requirements; ratio related to demands of animal;

[Total: 7]

[2]

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]

|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     | 2             |           |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------------------------|--------------------|------------|---------------|-------------------|-------------------------------------|---------------|-----------|
|                                                 | Page 4                                                                                                                                                              |                                                                                                                                                                                                |               | Mark Scheme IGCSE – October/November 2008 |                    |            |               |                   | Syllabus                            | · Par         | er        |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               | IGCS                                      | E – Octobe         | r/NOV      | rember 200    | 8                 | 0600                                | 196           | 3         |
| 7                                               | (a)                                                                                                                                                                 | (a) (i) white because all chicks are white;                                                                                                                                                    |               |                                           |                    |            |               |                   | Mb.                                 |               |           |
|                                                 |                                                                                                                                                                     | Page 4 Mark Scheme Syllabus  IGCSE – October/November 2008 0600  a) (i) white because all chicks are white;  (ii) DNA / genes / chromosomes / sperm and egg;  (iii) a a A A 1 mark for gametes |               |                                           |                    |            |               |                   | 186                                 |               |           |
|                                                 |                                                                                                                                                                     | (iii)                                                                                                                                                                                          | а             | а                                         | A                  | 4          | Α             |                   |                                     | netes         |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                | Aa            | Aa                                        | ,                  | <b>\</b> а | Aa            |                   | 1 mark for F <sub>1</sub> allow ecf |               | [2]       |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               | <i>7</i>                                  | •                  |            |               |                   |                                     |               | [-]       |
|                                                 | (b) rapid growth; A resistance to                                                                                                                                   |                                                                                                                                                                                                |               |                                           |                    |            | disease       |                   |                                     |               |           |
|                                                 | good conformation; breed characteristics;                                                                                                                           |                                                                                                                                                                                                |               |                                           |                    |            |               | [3]               |                                     |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               | ,                                         |                    |            |               |                   |                                     | ſΤ            | otal: 7]  |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     | [11           | otai. 1 j |
| 8                                               | (a)                                                                                                                                                                 | (i)                                                                                                                                                                                            | adva          | _                                         | •                  | spac       | e / range fo  | r food / c        | cost if qualified i                 | .e. wire or f | fencing   |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           | ed<br>ss chance of | catcl      | hing disease  | e / parasi        | tic worms;                          |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                | disa          |                                           | carry out nat      |            |               | I can har         | m neighbours' g                     | arden nlots   | : / theft |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                | uisa          |                                           | isy;               | sieu /     | predators /   | Can nan           | in neighbours g                     | jarderi piots |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     |               | [2]       |
|                                                 |                                                                                                                                                                     | <ul><li>(ii) rests grass / grass can regrow;<br/>controls diseases / pests from land e.g. worms;</li></ul>                                                                                     |               |                                           |                    |            |               |                   |                                     | [2]           |           |
| controls diseases / pests from land e.g. worms, |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               | [-]               |                                     |               |           |
|                                                 | (b) concrete floor for cleaning;<br>block wall prevent wind; gutter to prevent water into run;<br>iron roof for durability / less likely to catch fire; etc.        |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               | [3]               |                                     |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     |               |           |
|                                                 | (c) isolated / feathers ruffled / pale comb / smelly green droppings / low egg production / weight / blood in droppings / sneezing or running nose / drooping head; |                                                                                                                                                                                                |               |                                           |                    |            |               | loss of<br>max 2] |                                     |               |           |
|                                                 |                                                                                                                                                                     | WGI                                                                                                                                                                                            | giit /        |                                           | piligs / sileez    | zirig c    | or running in | ose / aro         | oping nead,                         | l             | illax 2]  |
|                                                 | (d)                                                                                                                                                                 | <u>10,</u>                                                                                                                                                                                     | 000 ×         | <u>4</u> = 200;                           |                    |            |               |                   |                                     |               | [1]       |
|                                                 |                                                                                                                                                                     | 2                                                                                                                                                                                              | 200           |                                           |                    |            |               |                   |                                     |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     | [Tot          | tal: 10]  |
| 9                                               | (a)                                                                                                                                                                 | saw                                                                                                                                                                                            | <i>i</i> / ha | mmer / spade                              | / auger / ha       | cksa       | w / mattock   | / snirit le       | vel·                                | ı             | max 4]    |
|                                                 | (ω)                                                                                                                                                                 | ouv                                                                                                                                                                                            | 7 110         | minor / opade                             | , raagoi , na      | onoa       | W / Mattook   | , opine io        | <b>v</b> 01,                        | ·             | illax ij  |
|                                                 | (b)                                                                                                                                                                 | ) (i) tins recycled / noise if disturbed;                                                                                                                                                      |               |                                           |                    |            |               |                   | [1]                                 |               |           |
|                                                 |                                                                                                                                                                     | (ii) using valuable wood resources / vulnerable to termites;                                                                                                                                   |               |                                           |                    |            |               | [1]               |                                     |               |           |
|                                                 |                                                                                                                                                                     | ` '                                                                                                                                                                                            |               | _                                         |                    |            |               | <b>- ,</b>        |                                     |               |           |
|                                                 | (c) cost of fence related to added income; which enterprise makes most income; which enterprise most at risk without fence;                                         |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     |               |           |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               | nced in involv                            |                    |            |               | ts;               |                                     | [             | [max 3]   |
|                                                 |                                                                                                                                                                     |                                                                                                                                                                                                |               |                                           |                    |            |               |                   |                                     | [To           | otal: 9]  |