



# **Agricultural Science Past Exam Questions**

## **Animal Production**

### **Ordinary Level**

**2013 – Section 1 – Question 5**

The following pieces of equipment are used regularly in agriculture.

Give a use for **each** piece of equipment in the space provided.

(a) Burdizzo:

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(b) Fostering crate:

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(c) Infra-red lamp:

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(d) Bulk tank:

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(e) Calving jack:

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(20 marks)

**2013 – Section 1 – Question 6**

Question 6.

(a) (i) The Friesian cow is described as a dual-purpose breed.

Explain the term dual-purpose in this context.

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(ii) What is the expected milk yield in litres per lactation for a high yielding Holstein-Friesian cow?

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(iii) At what age might a cow be expected to reach her maximum milk yield?

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(b) Cows may have to be removed or culled from the herd for a number of reasons.

Outline any **two** reasons for culling cows.

Reason 1. \_\_\_\_\_

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Reason 2. \_\_\_\_\_

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(20 marks)

**2013 – Section 1 – Question 7**

Give a scientific reason why each of the following tasks is carried out on farms:

(a) Silage pits are rolled.

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(b) Sheep are walked through a foot-bath.

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(c) Milking cows are fed dairy rations.

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(d) Hay is introduced to the diet of a calf about one week after birth.

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(e) Slurry is agitated from outside slatted houses.

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(20 marks)

**2013 – Section 2 – Question 9**

- (a) (i) Name **two** breeds of pig used in commercial pig production in Ireland.  
(ii) Describe **one** feature of each named breed.
- (b) List **two** managerial practices carried out on bonhams (piglets) during the first week after birth.
- (c) Describe the management of pigs in the following pig production houses:
- (i) Dry sow house.
  - (ii) Fattener house.
- (d) Explain the following terms in relation to pig production:
- (i) Food conversion ratio (FCR).
  - (ii) Gilt.
  - (iii) Farrowing crate.
  - (iv) Delousing.

(60 marks)

**2013 – Section 2 – Question 10**

- (a) British breeds and continental breeds are commonly used in beef production in Ireland.
- (i) Give **one** example of each type of breed.
  - (ii) Explain **one** advantage and one disadvantage of each type of breed.
- (b) Two-year calf-to-beef is a common beef production system.
- Give the target weights for beef cattle in this system at the following stages:
- (i) Start of first winter housing.

(ii) Start of second winter housing.

(iii) Slaughter.

(c) Describe the housing of weanlings during their first winter.

(d) Store period and compensatory growth are important terms in beef production.

Explain **each** term.

(60 marks)

**2013 – Section 2 – Question 13 – Part (c)**

(c) (i) Flushing and sponging of ewes are common practices in sheep production.

Explain the terms flushing and sponging as used here.

(ii) Maggots are a common parasite of sheep.

Maggots are the larvae of which insect?

(iii) Describe **three** common methods of maggot prevention or control in sheep management.

**2012 – Section 1 – Question 7**

(a) Give the recommended temperature for each of the following in relation to pig housing:

(i) Creep area. \_\_\_\_\_

(ii) Weaner house. \_\_\_\_\_

(iii) Fattener house. \_\_\_\_\_

(b) Why do bonhams have their teeth clipped soon after birth?

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(c) Give the approximate weight at which pigs are finished for slaughter.

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(20 marks)

**2012 – Section 2 – Question 8**

- (a) (i) Name **three** common sheep breeds.  
(ii) Name **two** parasites of sheep.
- (b) (i) State **three** advantages of housing sheep at lambing time.  
(ii) Describe **four** sheep management practices prior to and at mating time.
- (c) (i) Describe the diet of the lamb from birth to slaughter.  
(ii) What is the normal weight in kilograms at which lambs are slaughtered?

(60 marks)

**2012 – Section 2 – Question 10**

- (a) (i) Give the names of **two** breeds of cattle commonly used in milk production.  
(ii) Give the names of **two** breeds of cattle commonly used in beef production.
- (b) Read the following paragraph on dairy farming and, in your answer book, match each capital letter with the correct number of days from the list below.

List: 37 days; 21 days; 60 days; 282 days; 4 days; 305 days.

Cows are in heat or 'bulling' every \_\_\_A\_\_\_ days. The cow is pregnant or 'in-calf' for \_\_\_B\_\_\_ days. After calving the cow produces a special type of milk called colostrum for about \_\_\_C\_\_\_ days. The cow produces milk for an average of \_\_\_D\_\_\_ days in the year. The cow reaches her peak milk yield about \_\_\_E\_\_\_ days after calving. The cow should be 'dried-off' about \_\_\_F\_\_\_ days before the birth of the next calf.

- (c) Calving is a very important event on the dairy farm.

List **four** steps to help ensure successful calf rearing or successful replacement heifer rearing.

- (d) Describe any **two** ways to ensure good hygiene during milking and milk storage.

(60 marks)

**2012 – Section 2 – Question 12 – Part (a)**

- (a) (i) Describe **three** features of good winter housing for weanlings.  
(ii) Give the approximate live weight for cattle at the following stages of the two-year 'calf-to-beef' system:

1. First winter housing.

2. Slaughter.

(iii) At slaughter the beef carcass is graded for conformation and fatness.

Explain **each** underlined term

**2011 – Section 1 – Question 5**

Give a definition for each of the following terms used in animal production.

Livestock term	Definition
(i) Bullock (or steer)	
(ii) Gilt	
(iii) Draft or cast ewe	
(iv) Broiler	
(v) Suckler calf	

(20 marks)

**2011 – Section 2 – Question 8**

(a) Write a note on **each** of the following practices carried out in sheep production:

(i) Tail docking

(ii) Shearing

(iii) Raddling a ram

(iv) Dipping

(v) Walking the flock through a footbath.

(b) Several pieces of equipment and housing units are used to ensure good farm management.

Explain the use of **each** of the following on farms involved in livestock production:

(i) Isolation pen

(ii) Infrared lamp

(iii) Creep feeder

(iv) Crush

(v) Farrowing crate.

(60 marks)

**2010 – Section 1 – Question 3**

(a) Choose **two** dairy breeds from the following list of cattle breeds:

Charolais      Friesian      Simmental      Jersey      Hereford

Dairy breed 1.

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Dairy breed 2.

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(b) Describe **two** physical characteristics of a good dairy cow.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) What do the terms lactation and colostrum mean with regard to dairy cows?

Lactation. \_\_\_\_\_

Colostrum. \_\_\_\_\_

(d) What is the length of the standard lactation in dairy cows?

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(20 marks)

**2010 – Section 2 – Question 11**

(a) Irish beef animals are graded at slaughter according to their fatness and conformation.

(i) Explain the term conformation.

(ii) Describe the difference in conformation between beef cattle and dairy cattle.

(iii) What is the usual age for the slaughter of beef cattle in Ireland?

(iv) Why are beef cattle slaughtered at this age?

(b) Sheep breeding is an important part of the livestock industry in Ireland.

(i) Name **two** breeds of sheep used for lamb production in Ireland.

(ii) What is the average weight of a lamb at birth?

(iii) Describe the feeding and management of a new-born lamb.

(c) Livestock farmers often use a system called 'creep feeding'.

- (i) What does the term creep feeding mean?
- (ii) Give **three** advantages of creep feeding.

(60 marks)

**2009 – Section 2 – Question 8**

(a) (i) Name **two** breeds of cattle used in dairy farming.

(ii) Many calves die in the first week of life. List **two** management practices for successful calving.

(iii) State **one** way in which a farmer can ensure a cow will reach her peak milk yield.

(b) Calves are often grazed in the leader-follower system.

(i) What is the leader-follower system of grazing?

(ii) Give **two** reasons why calves are grazed in this way.

(iii) Cattle are housed for the winter in November. What is the ideal target weight for spring-born calves being housed for their first winter?

(iv) What measures can farmers take to ensure that underweight calves make an improved weight gain indoors?

(c) (i) What is mastitis?

(ii) State **one** symptom of mastitis.

(iii) Describe **two** ways of preventing mastitis in dairy cattle.

(60 marks)

**2009 – Section 2 – Question 12 – Part (b)**

(b) Beef animals are housed indoors during the winter months.

(i) List **three** housing requirements for weanlings housed in their first winter.

(ii) Animals kept indoors during the winter undergo compensatory growth in the summer. Explain the term compensatory growth.

(iii) State **two** conformation characteristics which are desirable in beef animals.

(iv) Why are most beef animals slaughtered at 2 years?

**2008 – Section 2 – Question 8**

- (a) State **four** precautions taken by a farmer to ensure the safe birth of a calf.
- (b) Give **two** benefits of feeding colostrum to a newborn calf.
- (c) Write a note about any **two** procedures carried out on calves within the first six months.
- (d) Describe **three** housing requirements of young calves.
- (e) What is the importance of tagging animals on the farm?
- (f) Explain how scour in calves is prevented and treated.

(60 marks)

**2008 – Section 2 – Question 11**

- (a) Name any **three** ingredients, apart from minerals, that you would find in a sheep concentrate and explain why each one of them is present.
- (b) Name **four** factors that influence the feeding value of silage.
- (c) Outline the changes that occur in the diet of a lamb during its first six months.
- (d) Name **one** disease caused by the lack of a mineral in any animal and explain how it affects this animal.
- (e) Give **one** reason for feeding hay to young cattle or young sheep.

(60 marks)

**2007 – Section 1 – Question 1**

- (a) Name one breed of pig. \_\_\_\_\_
- (b) When bonhams (piglets) are born, a number of procedures are carried out. Describe any **two** of these procedures.
  1. \_\_\_\_\_  
\_\_\_\_\_
  2. \_\_\_\_\_  
\_\_\_\_\_
- (c) What does creep feeding mean? \_\_\_\_\_  
\_\_\_\_\_

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(d) Intensive pig production involves moving animals to different houses.

Name any **two** of these houses.

1. \_\_\_\_\_

2. \_\_\_\_\_

(20 marks)

**2007 – Section 1 – Question 6**

(a) Name **three** breeds of continental beef animals.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

(b) State **two** benefits of using artificial insemination (AI) instead of natural service.

1. \_\_\_\_\_

2. \_\_\_\_\_

(c) Explain what tail painting is used for.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(d) Give the length of the gestation period of a cow.

\_\_\_\_\_

(20 marks)

**2007 – Section 2 – Question 9**

(a) Mixed grazing of cattle and sheep is used on some farms. Give **three** benefits of using mixed grazing as a system.

(b) In farm enterprises, animals are culled.

(i) What is meant by culling?

- (ii) Give **three** reasons that animals are culled.
- (c) List **three** management techniques used in farming to ensure high milk yield.
- (d) (i) Name any **three** constituents of milk.  
(ii) Outline a laboratory method to show the presence of one named constituent in milk.

(60 marks)

**2007 – Section 2 – Question 13**

- (a) Distinguish between **flushing** and **steaming** up in lowland sheep production.
- (b) Describe the management of a lamb from birth to weaning.
- (c) Give **two** reasons why shearing of sheep takes place.
- (d) In relation to any named disease of sheep, describe its cause, its symptoms and its control.

(60 marks)

**2006 – Section 1 – Question 1**

(a) Explain the term “lactation period”. \_\_\_\_\_  
\_\_\_\_\_

(b) Before a dairy cow calves, she is “dried off” for a period.

(i) How long is she dried off for before calving?  
\_\_\_\_\_

(ii) Give **one** reason why this happens. \_\_\_\_\_  
\_\_\_\_\_

(c) Give **one** reason why colostrum is so important for the calf.  
\_\_\_\_\_

(d) During the year, a farmer may have to keep some replacement heifers for milk production.

Give **one** reason why cows have to be replaced.  
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(20 marks)

**2006 – Section 1 – Question 3**

(a) Give **two** reasons why animals are housed during the winter months.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(b) Describe, briefly, any **two** features of winter housing for cattle or sheep.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(c) Name any **three** feedstuffs that a farm animal could be fed during this period.

(i) \_\_\_\_\_

(ii) \_\_\_\_\_

(iii) \_\_\_\_\_

(d) Explain the term “store period”. \_\_\_\_\_

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(20 marks)

**2006 – Section 2 – Question 9**

(a) Name **two** breeds of each of the following

(i) Pig    (ii) Sheep    (iii) Beef animal    (iv) Dairy animal.

(b) In the case of **one** named breed of any one animal, state **two** characteristics of the breed.

(c) If you want to produce high quality food from animals, the management of animal health is important. State **four** ways that you can keep animals healthy.

(d) Explain “condition scoring” in regard to animals.

(e) State **four** precautions that should be taken when buying in animals.

(60 marks)