0171-510 MARCH 2019
Level 3 Advanced Technical Extended Diploma in Agriculture (Livestock)
Level 3 Agriculture – Theory exam (2)

Candidate name (first, last)
First
Last
Candidate enrolment number Date of birth (DDMMYYYY) Gender (M/F)
Assessment date (DDMMYYYY) Centre number Candidate signature and declaration*

• If additional answer sheets are used, enter the additional number of pages in this box.
• Before taking the examination, all candidates must check that their barcode label is in the appropriate box. Incorrectly placed barcodes may cause delays in the marking process.
• Please ensure that you staple additional answer sheets to the back of this answer booklet, clearly labelling these with your full name, enrolment number, centre number and qualification number in BLOCK CAPITALS.
• All candidates need to use a black/blue pen. Do not use a pencil or gel pen, unless otherwise instructed.
• If provided with source documents, these documents will not be returned to City & Guilds, and will be shredded. Do not write on the source documents.

*I declare that I had no prior knowledge of the questions in this examination and that I will not divulge to any person any information about the questions.

You should have the following for this examination
• a pen with blue or black ink

General instructions
• Use black or blue ball-point pen.
• The marks for questions are shown in brackets.
• This examination contains 12 questions. Answer all questions.
• Answer the questions in the spaces provided. Answers written in margins or on blank pages will not be marked.
• Cross through any work you do not want to be marked.
1 Name two parts of the respiratory system. (2 marks)

2 Define the following terms.
   a) Genotype. (1 mark)

3 Explain how a polled cow mated with a polled bull can produce horned offspring. (4 marks)
4 List **four** different beef traits represented by Estimated Breeding Values. (4 marks)

5 Using Figure 1, name the parts of the male reproductive system, labelled A-D. (4 marks)
6 a) State **four** factors affecting the nutritional requirements of commercial pigs. (4 marks)

b) Describe how **each** of the factors from 6a) affect the nutritional requirements of commercial pigs. (4 marks)

7 Name **four** high protein sources suitable for use in a ruminant’s diet. (4 marks)
8 Describe two methods that a farm can use to improve accuracy when applying organic waste to land. (2 marks)

9 a) State four factors to consider when planning the disposal of organic farm waste. (4 marks)

b) Explain two reasons why it is important to analyse organic farm waste before application. (4 marks)
10 State **six** ways to help prevent a rough terrain telescopic forklift (RTFL) from overturning, when loading a trailer with farm yard manure. (6 marks)

11 A farm worker is driving a sit-astride all-terrain vehicle (ATV) with no differential. Explain why they should lean when cornering at low speeds. (4 marks)
12 Discuss selective breeding in livestock production and its importance in the future. (12 marks)