0171-502 MARCH 2019
Technicals in Agriculture
Level 3 Agriculture – Theory exam (1)

Friday 15 March 2019
09:30 – 11:30

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.

* 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.

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1 State **five** husbandry tasks that should be undertaken on new born lambs in the first week of their life. (5 marks)

2 Give **two** advantages for **each** of the following cutting mechanisms.
   a) Finger bar. (2 marks)

3 How can a farmer reduce the machinery costs when growing a crop of wheat? (4 marks)
4 State **four** reasons why weeds are becoming resistant to herbicides. 

5 State **two** types of plant reproduction. 

6 State **two** functions of guard cells.
7 Explain how the following factors affect the rate of plant transpiration.
   a) High temperature. (2 marks)

   b) High humidity. (2 marks)

   c) Increased water supply. (2 marks)

   d) Increased light. (2 marks)
8 Explain how the following soil characteristics affect plant growth and development.
   a) Organic matter.

b) Poor drainage.

9 Give three potential consequences of soil erosion to agriculture.
10 A farmer wishes to increase the efficiency of the sow breeding cycle.
   a) Which four actions should the farmer take to achieve this? 

b) Give four ways to reduce piglet mortality between birth and weaning. 

11 Give two examples of later maturing beef breeds. 

A farmer wishes to increase their efficiency in controlling the pests, diseases and weeds on the arable crops.

Discuss the different methods the farmer can use to achieve this. (12 marks)