



Agricultural Science Past Exam Questions

Fertilisers, Pollution & the Environment

Higher Level

2011 – Question 8 – Part (b)

- (b)
- (i) Explain the meaning of the term B.O.D.
 - (ii) Name one agricultural pollutant with a high B.O.D.
 - (iii) Explain how the named pollutant affects water quality.
 - (iv) Suggest two key elements of a waste management strategy for the named pollutant.

2010 – Question 1 – Part (i)

- (i) Suggest two reasons why a farmer might use sulphate of ammonia rather than other forms of artificial nitrogenous fertilisers.

2009 – Question 5

- (a) Describe the cultivation of spring barley or main-crop potatoes under the following headings:

- (i) Soil requirements
- (ii) Rotation
- (iii) Weed control
- (iv) Yield (tonnes per hectare).

- (b) (i) Explain the following terms as they apply to artificial fertilisers:

Placement

Broadcasting

Top-dressing.

- (ii) Suggest a crop situation in which one of the above methods is used.

- (c) Consumer demand in Ireland is for floury (high dry-matter) potatoes.

- (i) Suggest a suitable compound fertiliser for the production of floury tubers.
- (ii) Give three causes of low dry matter in potato tubers.

(48 marks)

2009 – Question 8 – Part (a)

- (a) (i) With the aid of a labelled diagram briefly describe the carbon cycle.
- (ii) Suggest one practice farmers could adopt to reduce the carbon footprint of Irish agriculture.

2009 – Question 9 – Part (b)

- (b) (i) Compare and contrast slurry and FYM.
- (ii) Suggest two disadvantages of spreading slurry.

2008 – Question 1 – Part (i)

- (i) Give reasons why calcium ammonium nitrate gives a more rapid crop response than urea.

2007 – Question 8 – Part (c)

- (c) (i) Describe the factors that affect the composition of animal slurry.
- (ii) Explain two advantages of the spreading of organic manures on soils.
- (iii) Name two gases that may build up in stored slurry.
- (iv) State one precaution that should be taken when agitating slurry in a slatted house.

(48 marks)

2006 – Question 3 – Part (a) – Option 1

- (a) The photograph below shows a dung beetle.
- (i) Name the phylum to which dung beetles belong.
- (ii) Describe two benefits from the activities of dung beetles.
- (iii) State two advantages of adding farmyard manure to a soil.

