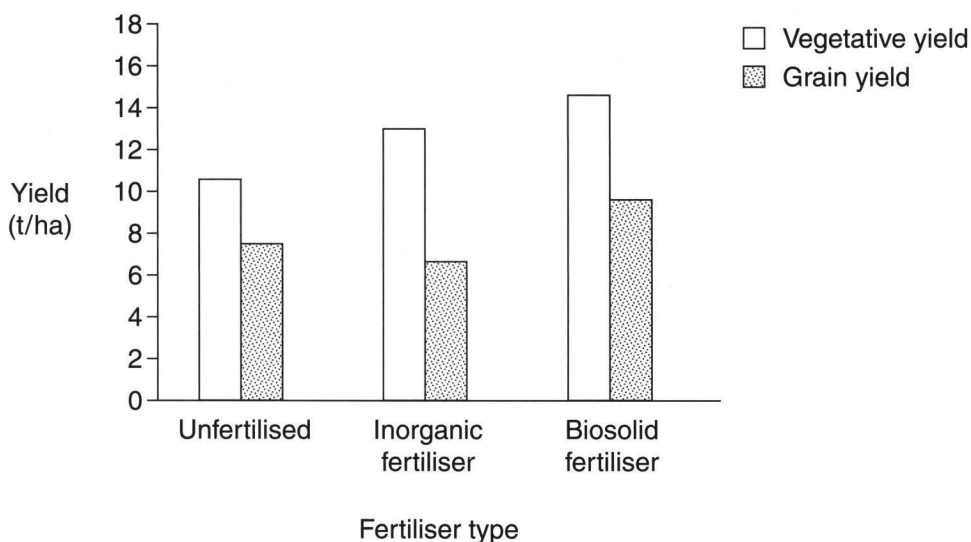


Question 25 (7 marks)

Digested 'biosolid' (the solid residue produced from effluent) is being applied as a fertiliser as an alternative to inorganic fertilisers.

A study was carried out to investigate the effects of biosolid fertiliser on the growth and grain yield of maize. The level of vegetative yield (t/ha) and grain yield (t/ha) are shown.



- (a) Explain why the grain yield from the application of inorganic fertiliser differed from that of the control. 3

Other factors may have been resulted in the differing yield as an indirect result from the fertiliser. This could be greater weed competition or the fact that the fertiliser supplied the wrong nutrients for that grain.

Question 25 continues on page 18

Question 25 (continued)

- (b) Explain why a maize producer may decide NOT to use biosolid fertiliser.

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Reasons for not using biosolid fertiliser could be:

- Expense - It may cost more and reduce profit from the maize crop.
- Soil effects - This fertiliser may change nutrient content in a way that will affect future crops.
- Environmental factors - may affect the effectiveness of this fertiliser, easily leached or denatured.

End of Question 25