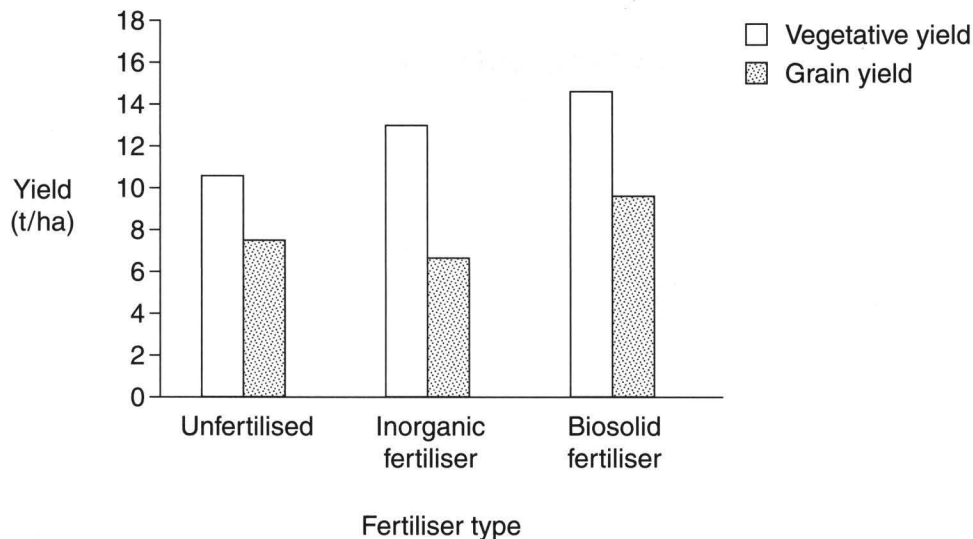


Question 25 (7 marks)

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

The inorganic fertiliser has gives the grain vegetative yield a greater yield as it has given it enough nutrients for plant growth but not enough for grain development and may have had chemicals that hindered the growth of the grains.

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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The maize producer may not decide to use biosolid fertiliser as it has a greater negative yield making the processing longer as there is more roughage involved. Another reason could be that the farmer only want a certain yield to be produced to reduce wastage. The farmer may also need not be able to access the amount of biosolid needed to fertilise his crops.

End of Question 25