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Question 21 (7 marks)

- (a) What is meant by the term *ecologically sustainable food production*? 2

The growth of crops <sup>and animals</sup> is done without the use of fertilisers, insecticides and other chemicals that may damage the environment. An example is organic farming.

- (b) Discuss the use of genetically modified crops in food production. 5

Genetically modified crops are produced by placing a gene from another organism into a plant or animal. This may allow a larger yield, more disease-resistant crops or animals, the ability of plants/animals to withstand high or low temperatures, or food with added nutrients that can assist those in developing countries to consume sufficient nutrients, preventing malnourishment. However, this poses a risk as diseases can become resistant and develop strength, there are ethical concerns and it may conflict with religious or cultural beliefs and values.