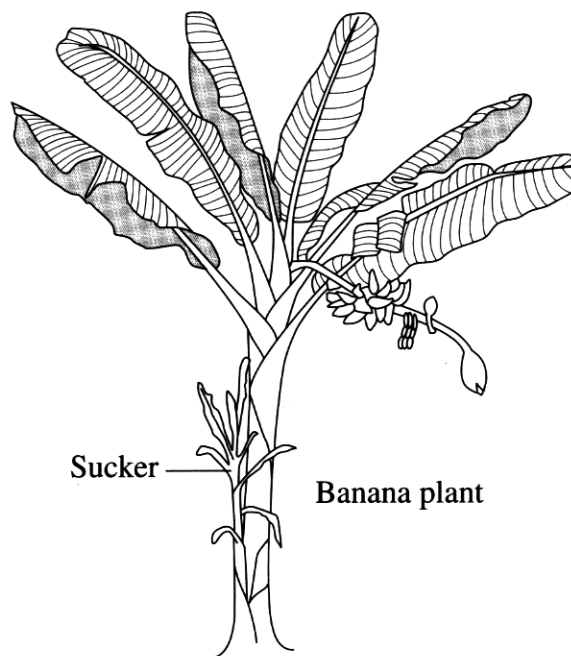


Marks

Question 24 (4 marks)

Traditionally, banana plants in Australia have been propagated asexually by cutting out and planting suckers from the adult plant.

4



There is a growing trend to produce disease-free plants in laboratories through a process of cloning from disease-free tissues from existing plants.

Assess the potential impact of this cloning process on the genetic diversity of banana plants in Australia.

The genetic diversity of the banana plant in Australia will be eliminated and all banana plants will be the same. Different variations of bananas including size, taste and structure will all be gone and only one banana type will be produced which is disease free. Money however will be saved in ways of less crops will be lost due to disease infected plants but the initial cost of the cloning would be very expensive.