

2010 HIGHER SCHOOL CERTIFICATE EXAMINATION
Biology

Section I – Part B (continued)

Question 23 (7 marks)

donkey / horse = mule

- (a) Use an example to explain why hybridisation within a species is carried out. 2

Hybridisation is carried out in order to produce stronger organisms. The hybridisation of a donkey and a horse, results into a mule who is tougher and stronger and than a donkey or horse, however, the mule is infertile.

- (b) Use an example of a named transgenic species to discuss the social and environmental impact of this technology. 5

~~Trans~~ Transgenic species are created through the insertion of another species ^{desirable} genes into the genes of a species which will give it an advantage. For example, Strawberries which are grown in colder regions have been inserted with genes from salmon in order to make it resistant to the cold. This allows these strawberries to survive in colder conditions than the normal species of strawberries.

Strawberry
with gene
from
salmon