

2001 HIGHER SCHOOL CERTIFICATE EXAMINATION

Biology

Section I – Part B (continued)

Marks

Question 22 (6 marks)

- (a) Cloning is a technique that could be used to increase numbers in an endangered species. What effect would cloning have on the genetic diversity of the species? **2**

..... The effect would be that they.....
..... would eg... cloning a good milk cow, is cloned.
..... The clone would become just like that,
..... I think its a advantage to diversity
..... of difereent species.

- (b) Explain TWO possible evolutionary effects of a disease entering an endangered population containing some cloned individuals. **4**

..... Rejection of gene, not all
..... animals cloned came out a perfect
..... one. sometimes their bodies
..... reject the gene which there
..... bodies cant take in. Maybe
..... causing death or b diseased.
.....
.....

Marks

Question 23 (3 marks)

In twelfth-century China, people seeking protection from smallpox removed scabs from people mildly scarred from the disease. These scabs were then ground and inhaled as powder. Similarly, in the seventeenth century, an Englishwoman, Mary Montagu, injected bits of smallpox scabs into healthy children to protect them from the disease.

3

In the light of our current knowledge about the immune response, explain why these practices were successful.

these practices were successful because if you put a small amount of the disease into the human body it became immune to the disease.

Question 24 (4 marks)

Explain the relationship between the cause and ONE symptom of ONE named non-infectious disease.

4

Skin Cancer - Skin Colour, - When the sun burns the skin, the skin colour changes causing redness and sometimes spots it is non-infectious because the skin cannot be passed on to another person.