

2002 HIGHER SCHOOL CERTIFICATE EXAMINATION

Biology

Section I – Part B (continued)

Marks

Question 25 (4 marks)

- (a) Define the concept of *punctuated equilibrium* in evolution. 1

PUNCTUATED EQUILIBRIUM REFERS TO A SUDDEN CHANGE  
IN AN ANIMAL'S STRUCTURE

- (b) How does punctuated equilibrium differ from the process proposed by Darwin? 3

DARWIN PROPOSED THAT ALL LIFE COMES  
FROM A SIMILAR ORGANISM SLOW AND GRADUAL.  
PUNCTUATED EQUILIBRIUM, ON THE OTHER HAND,  
SHOWS A QUICK CHANGE EITHER FROM A  
QUICK WIPEOUT OF A CERTAIN POPULATION IN  
WHICH ANIMALS WITH A MUTATION FROM THE  
ORIGINAL CAN SURVIVE