

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

where there is an evolution of a species, then followed by no evolution, then ~~as~~ a surge in evolution of another species

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

Punctuated equilibrium, such as the dinosaur age rapidly to the mammal age, is different to Darwin's theory of gradualism. Darwin proposed that there was a gentle and gradual increase in evolution of species where there is sufficient fossil evidence e.g. the horse structure and height by fossils. With punctuated equilibrium the fossil evidence is incomplete because of sudden change in evolution from one species to the next.