

2002 HIGHER SCHOOL CERTIFICATE EXAMINATION
Biology

Section I – Part B (continued)

Question 25 (4 marks) **Marks**

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

Punctuated equilibrium states that evolution occurs quickly over a 10^2 of years and then levels out stays stable



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

Darwin proposed that evolution occurred gradually. As pressure was put upon species to evolve they did so favourable characteristics were passed on to offspring continuously. It was a gradual process. Punctuated equilibrium states that environmental pressures were allowed to build up on a species and then it evolved rapidly this was followed by a stable state where once again environmental pressures were allowed to build up