

2002 HIGHER SCHOOL CERTIFICATE EXAMINATION
Biology

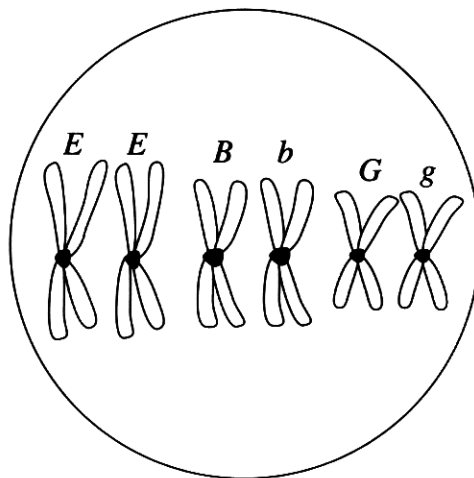
Section I – Part B (continued)

Marks

Question 22 (4 marks)

The diagram shows a cell containing three pairs of chromosomes just prior to a *meiotic* division.

4



Assuming that random segregation occurs, construct a table that lists the possible genotypes that could be produced and states the expected frequency for each genotype.

EBG E bG E b g E Bg

Possible genotypes	expected frequency
<i>EBG</i>	<i>1/8</i>
<i>E bG</i>	<i>1/8</i>
<i>E b g</i>	<i>1/8</i>
<i>EBg</i>	<i>1/8</i>