

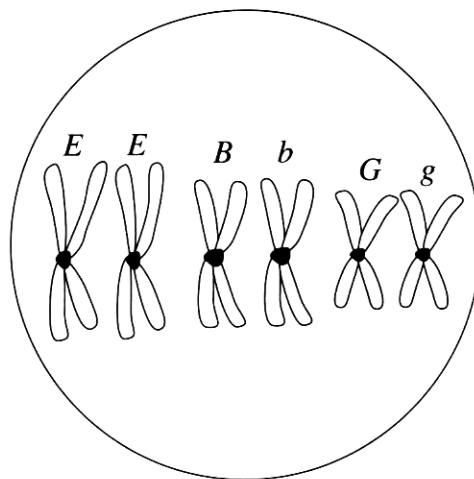
2002 HIGHER SCHOOL CERTIFICATE EXAMINATION
Biology

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.

E E B b G g

E B G
E B g
E b g
E b G

~~100% expectancy for each genotype~~

100% expectancy for E

50% expectancy for B

50% expected frequency for b

50% expected frequency for g

50% expected frequency for G