

2002 HIGHER SCHOOL CERTIFICATE EXAMINATION

Biology

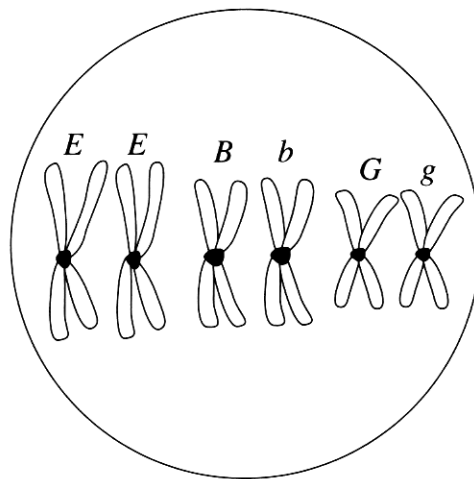
Section I – Part B (continued)

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.

1	2	frequency
E	E	1
E	B	2
E	b	2
E	G	2
E	g	2
B	B	1
B	b	1
B	G	1
B	g	1
b	B	1
b	b	1
b	G	1
b	g	1