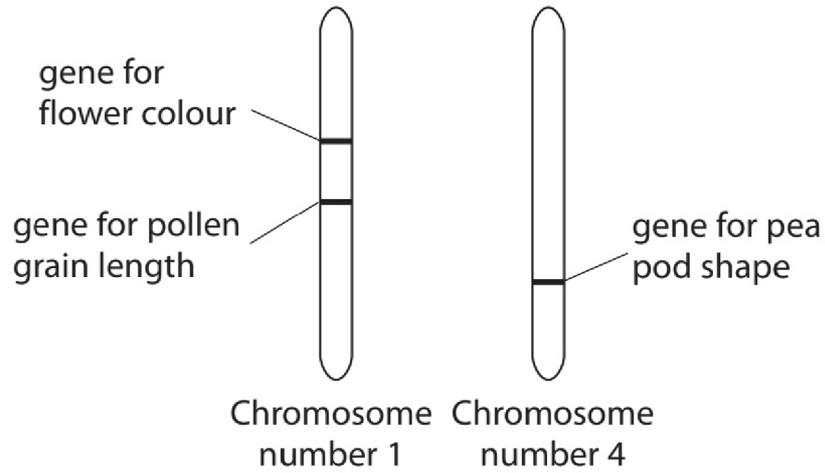


- (c) Sweet pea plants were used in an investigation into the inheritance of flower colour, pollen grain length and pea pod shape.

Each of these traits is controlled by a single gene. Sweet peas have seven pairs of chromosomes.

The arrangement of these three genes on sweet pea chromosomes is shown in the diagram.



Comment on the role of meiosis in the inheritance of these traits.

(4)

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(Total for Question 7 = 11 marks)