

**MARKS**

5. Suppose you have torn a tendon and are facing surgery to repair it. The orthopedic surgeon explains the risks to you: Infection occurs in 3% of such operations, the repair fails in 14%, both infection and failure occur in 1%.

- 6  
(4, 2)
- (a) Find the percentage of these tendon-repair operations that succeed and are free from infection.  
(b) Can the two outcomes 'infection' and 'failure' reasonably be modelled as being *probabilistically independent*? Answer *Yes* or *No* and then justify your answer.

(a)

(a)

Percentage

(b)

(b)

*Yes* or *No*