Qu	Scheme	Marks	AO
2 (a)	[Let p = P(F | C)]		
	Tree diagram or some other method to find an equation for p	M1	2.1
	$0.1\times0.09+0.3\times0.03+0.6\times p=0.06$	A1	1.1b
	p = 0.07 i.e. **7%**	A1	1.1b
		(3)	
(b)	e.g. P(B and F) = $0.3\times0.03=0.009$ but		
	$P(B)\times P(F)=0.3\times0.06=0.018$	B1	2.4
	These are not equal so not independent		
		(1)	
		(4 marks)	

Notes

(a) M1 for selecting a suitable method to find the missing probability
e.g. sight of tree diagram with 0.1, 0.3, 0.6 and 0.09, 0.03, p suitably placed
e.g. sight of VD with 0.009 for $A\cap F$ and $B\cap F$ and 0.6p suitably placed
or attempt an equation with at least one correct numerical and one "p" product (not necessarily correct) on LHS
or for sight of 0.06 – (0.009 + 0.009) (o.e. e.g. 6 – 1.8 = 4.2%)
1st A1 for a correct equation for p (May be implied by a correct answer)
or for the expression $\dfrac{0.06-(0.009+0.009)}{0.6}$ (o.e.)
2nd A1 for 7% (accept 0.07)
Correct Ans: Provided there is no incorrect working seen award 3/3
e.g. may just see tree diagram with 0.07 for p (probably from trial and improv')

(b) B1 for a suitable explanation…may talk about 2nd branches on tree diagram and point out that 0.03 ≠ 0.06 but need some supporting calculation/words
Can condone incorrect use of set notation (it is not on AS spec) provided the rest of the calculations and words are correct.