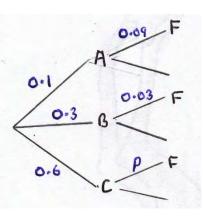
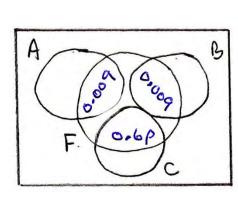
_			
Qu	Scheme	Marks	AO
2 (a)	[Let $p = P(F \mid C)$]		
	Tree diagram or some other method to find an equation for <i>p</i>	M1	2.1
	$0.1 \times 0.09 + 0.3 \times 0.03 + 0.6 \times p = 0.06$	A1	1.1b
	p = 0.07 i.e. 7%	A1	1.1b
	· —	(3)	
(b)	e.g. $P(B \text{ and } F) = 0.3 \times 0.03 = 0.009$ but	` /	
	$P(B) \times P(F) = 0.3 \times 0.06 = 0.018$	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		
	<u>or</u> for sight of $0.06 - (0.009 + 0.009)$ (o.e. e.g. $6 - 1.8 = 4.2\%$)		
	1^{st} A1 for a correct equation for p (May be implied by a correct answer)		
	or for the expression $\frac{0.06 - (0.009 + 0.009)}{0.6}$ (o.e.)		
	$\frac{\text{of}}{0.6}$ for the expression $\frac{0.6}{0.6}$		
	2 nd 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 explanationmay talk about 2 nd branches on tree diagram		
	and point out that $0.03 \neq 0.06$ 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.