

Q	Marking Instructions	AO	Mark	Typical Solution
14 (a)(i)	Finds correct probability OE	1.1b	B1	$\frac{10}{120}$
14 (a)(ii)	Finds total number for 'depression'	1.1a	M1	$9 + 2 + 1 = 12$ $\frac{12}{120}$
	Calculates correct probability OE	1.1b	A1	
14 (a)(iii)	Uses conditional probability to calculate $P(\text{stress} \text{low exercise})$ to obtain $\frac{38}{39 \leq x \leq 119}$	1.1a	M1	$\frac{38}{50}$
	Obtains correct probability ACF	3.1b	A1	
14(b)	Shows that $14+38$ or $52$ or $\frac{14}{50} + \frac{38}{50}$	3.1b	M1	$14 + 38 = 52$ $52 > 50$  so events are not mutually exclusive
	Compares $14+38$ with $50$ or compares $\frac{14}{50} + \frac{38}{50}$ with $1$ and concludes events are not mutually exclusive	2.4	R1	
	Total		7	