Question Number	Scheme	Marks
2 (a) (i)	$S_{yy} = 81938.5 - \frac{2015^2}{50} [= 734]$ *	B1*
(ii)	$r = \frac{219.55}{\sqrt{734 \times 72.25}} = 0.95338...$ awrt 0.953	M1 A1
		(3)
(b)	e.g. [In general] the longer the rabbit the greater the weight	B1ft
		(1)
(c)	Consistent/Yes as *r*/PMCC is close to 1	B1ft
		(1)
(d)	$b = \frac{219.55}{734} = 0.2991...$	M1 A1
	$a = \left(\frac{125}{50}\right) - 'b'\left(\frac{2015}{50}\right) [= -9.554...]$	M1
	$w = -9.55 + 0.299y$	A1
		(4)
(e)	$'-9.55' + '0.299' \times 45 = 3.905$ awrt 3.91	M1 A1ft
		(2)
	Notes	**Total 11**

(a)(i)	**B1***	Answer is given so a correct numerical expression and no incorrect working seen
(ii)	**M1**	For use of $\frac{S_{yw}}{\sqrt{S_{yy} \times S_{ww}}}$ May be implied by awrt 0.953
	A1	awrt 0.953
(b)	**B1ft**	A correct interpretation ft their *r* value (provided that $\lvert r \rvert < 1$) e.g as length/*y* increases the weight/*w* increases Ignore any figures quoted. Do not accept comments about correlation on their own
(c)	**B1ft**	A correct statement with a correct reason ft their *r* value (provided that $\lvert r \rvert < 1$) Allow $0.953 \approx 1$ Allow 'my value' to imply *r*
(d)	**M1**	A correct method to find the gradient (May be implied by awrt 0.299 or $\frac{4391}{14680}$)
	A1	awrt 0.299 (Condone awrt 0.3 if M1 scored) May be implied by a correct gradient in the regression line.
	M1	A correct method to find the intercept ft their *b* (May be implied by awrt –9.55)
	A1	For $w = (\text{awrt}) - 9.55 + (\text{awrt})0.299y$ Must be seen in part (d)
(e)	**M1**	For substitution of 45 into their regression equation
	A1ft	For awrt 3.91 or ft their regression line, provided their final answer is > 0. If regression line is not correct, then you will need to check their answer