Mark Scheme

Q1.

Question number	Answer	Additional guidance	Mark

(a)	B2 SRCC is sensible because... (one reason from)
	• e.g. we expect correlation (if price
	• depends on quality)
	   e.g. it will show if there is correlation / is a relationship
	   e.g. the (three) highest quality mince pies do seem to be the (three) most expensive
		B2 for correct conclusion with a sensible reason why.
		OR
		B1 for an incomplete answer. e.g. correct reasoning with incorrect or no conclusion, or 'yes' with an attempt at a reason e.g. 'yes, as it is bivariate/ranked data', is B1 only
			(2)

(b)	B1 e.g. higher quality mince pies are more expensive, or price does depend on quality, or there is agreement between (quality and price) ranks
	B1 there is ...
	     • **positive correlation**, or
	     • (0.77) is **close to 1**, or
	     • accept **strong correlation**
		1st B1 for a correct interpretation of (positive) correlation. Allow equivalent wording.
		(condone e.g. 'taste' for 'quality')
		Note e.g. 'as one increases the other increases' is B0
		2nd B1 for formally recognising (positive) correlation.
			(2)

Q2.

Question	Answer	Additional guidance	Mark
(a)	B1 Quota		(1)
(b)	B1 for e.g. • not random • not representative • biased • there are very different numbers of students from each nationality	B1 for a correct statement explaining why the method of sampling is not appropriate	(1)
(c)	M1 $\dfrac{600 \times 979}{11727}$ A1 50	Accept a correct equivalent calculation	(2)
(d)	B1 The result is outside the range $-1 \leq r \leq 1$	B1 for correct interpretation of the correlation coefficient, allow the result is bigger than 1	(1)
(e)(i)	B1 Positive B1 The students were in reasonable/good agreement oe	B1 for correct statistical conclusion B1 for correct contextual interpretation of conclusion	(2)
(e)(ii)			

Q3.

Question number	Answer	Additional guidance	Mark
(a)(i)	B1 Positive correlation	B1 for correct statistical conclusion	(1)
(a)(ii)	B1 The judges were in reasonable/good agreement oe	B1 for contextual interpretation of conclusion	(1)
(b)	B1 for answer with reason, e.g. • No AND reference to the change in context (sponge cakes versus flower arranging) • Yes, likely to give similar ranks AND reference to the fact that the judges have similar tastes		(1)