

Question			Answer	Marks	AO	Guidance
				[5]		
12	(a)		Opportunity/Convenience sampling	B1	1.2	Condone ‘Opportunistic Sampling’
				[1]		
12	(b)		Because every sample (of size n) does not have the same probability of being selected	B1	2.4	Accept ‘all adult males registered at the surgery do not have an equal chance of being selected’ Accept ‘everyone registered at the surgery does not have an equal chance of being selected’ OR ‘For a SRS each element from the SF must have an equal chance of selection’ OR ‘A subset of the population cannot form a complete sampling frame’ OR ‘The sampling frame would be incomplete’ ‘No random method employed in the process’ B0 (need to have the idea that the SF is incomplete) ‘Only collected data from one week’ is B0
				[1]		

Question			Answer	Marks	AO	Guidance														
12	(c)		<table border="1"> <tr> <td>w</td><td>50-</td><td>65-</td><td>70-</td><td>80-</td><td>90-</td><td>100-120</td></tr> <tr> <td>f</td><td>6</td><td>8</td><td>8</td><td>11</td><td>6</td><td>6</td></tr> </table>	w	50-	65-	70-	80-	90-	100-120	f	6	8	8	11	6	6	B1	1.1	
w	50-	65-	70-	80-	90-	100-120														
f	6	8	8	11	6	6														
				[1]																
12	(d)		$\frac{2}{3} \times \text{their } 6 + \frac{1}{2} \times \text{their } 6$ Or $(10 \times 0.4) + (10 \times 0.3)$ $\frac{7}{45}$ or 0.15 or 0.15555 to 0.156 Mark at most accurate	M1 A1FT	1.1 1.1	IF part (c) is correct then this could be implied by '4 +3' FT their 6, 6 and 45. May need to check their calculation. May see interpolation methods, which lead to the same calc.														
				[2]																
12	(e)		The distribution of the weights within each class is unknown	E1	2.4	Accept 'we assume that the values (individual weights) are equally distributed in each class interval' Accept 'the individual values (weights) are not known' Accept 'the number of people (frequency) in each category of the histogram may not be spread out equally across the category' Accept 'we don't know exactly how many were less than 60kg <u>and</u> how many were more than 110kg' (idea of correct frequency at both ends for correct probability calculation)														
				[1]																