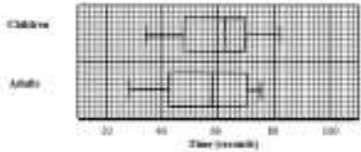


Question	Answer	Marks	AO Element	Notes	Guidance
1(a)	6	1			
1(b)	19	1			
2	Bars are not the same width oe Frequency scale is not linear oe	2		B1 for each.	
3(a)	93.4	4		M1 for mid-values soi M1 for Σfx M1 dep on second M for $\Sigma fx \div 200$	
3(b)	19	2		M1 for $\frac{86}{50}$ or $\frac{114}{60}$	
4(a)	121 or 120.8... or $128\frac{5}{6}$	4		M1 for midpoints soi M1 for use of Σfx with x in correct interval including both boundaries but not if x is 50, 50, 100 and 300 M1 (dep on 2nd M1) for $\Sigma fx \div 120$	
4(b)	12.4 5 1.4	3		B1 for each If 0 scored SC1 for fd's [0.86,] 0.62, 0.25 and 0.07 oe	

Question	Answer	Marks	AO Element	Notes	Guidance
4(c)	43 74 99 120	2		B1 for 2 or 3 correct	
4(d)	Correct diagram	3		<p>B1 for correct horizontal placement for 4 plots</p> <p>B1FT for correct vertical placement for 4 plots</p> <p>B1FT dep on at least B1 for reasonable increasing curve or polygon through their 4 points</p> <p>If 0 scored SC1 FT for 3 out of 4 points correctly plotted</p>	
4(e)(i)	Strict FT <i>their median</i> reading	1			
4(e)(ii)	Strict FT <i>their UQ</i> reading	1			
4(e)(iii)	Strict FT <i>their</i> reading at 40th percentile	2		B1 for 48 written or mark at cf = 48 on graph	
4(e)(iv)	Strict FT <i>their</i> reading at 400 – <i>their</i> reading at 250	2		B1 for either correct reading at 250 or 400	
5(a)	38	1			

Question	Answer	Marks	AO Element	Notes	Guidance
5(b)	Blocks of heights 4.4 and 3.4 with correct widths	2		B1 for each correct block If B0 scored, SC1 for both correct frequency densities soi	
6	Correct histogram	3		B1 for each column If 0 scored SC1 for correct frequency densities soi 1.25, 12, 1	
7(a)	Correct bar	1			
7(b)	December	1			
7(c)	82	1			
7(d)	16.4	1		FT <i>their (c) ÷ 5</i>	
8	Correct histogram	4		B1 for each correct block If 0 scored, SC1 for 5, 20, 24, 1 seen	

Question	Answer	Marks	AO Element	Notes	Guidance
9	Correct histogram	4		B1 for each correct block If 0 scored, SC1 for the four frequency densities seen	
10(a)	32	1			
10(b)	Positive	1			
11(a)	120	1			
11(b)	130	1			
11(c)	60	1			
12(a)	70	1			
12(b)	78	1			
12(c)	Value in range $86 < V \leq 90$	1			

Question	Answer	Marks	AO Element	Notes	Guidance
12(d)	<p>One <u>general</u> comment <u>interpreting</u> the median comparison nfw</p> <p>e.g. Students did better on second test oe</p> <p>OR</p> <p>One <u>general</u> comment <u>interpreting</u> IQR/range comparison nfw</p> <p>e.g. Students marks were more consistent on the 2nd test oe</p>	1			
13(a)	22	2		B1 for 48 and 70	
13(b)		2		M1 for a box with two whiskers and at least two correct from Min 28, LQ 42, Med 58, UQ 70, Max 75	
14(a)	54 84 93	2		B1 for 2 correct or 1 error and 2 correct or FT	

Question	Answer	Marks	AO Element	Notes	Guidance
14(b)	correct diagram with all points correctly plotted	3		<p>B1FT <i>their</i> (a) for plots at 5 correct heights</p> <p>B1 for 5 points at upper ends of intervals on correct vertical line</p> <p>B1FT (dep on at least B1) for increasing curve or polygon through 5 points</p> <p>After 0 scored, SC1FT for 4 correct points plotted</p>	
14(c)(i)	9 to 9.8 final answer	1			
14(c)(ii)	8.5 to 11.5	2		<p>B1 for [UQ =] 15.5 to 17.5 or [LQ =] 6 to 7 seen</p>	
14(c)(iii)	10, 11 or 12	2		<p>B1 for 88 to 90 seen or for answer between 10 and 12</p>	

Question	Answer	Marks	AO Element	Notes	Guidance
15(a)	111.25	4		<p>M1 for midpoints soi (25, 75, 112.5, 137.5, 175)</p> <p>M1 for $\sum fx$ with x in correct interval including both boundaries</p> <p>M1 (dep on 2nd M1) for $\sum fx \div 20$</p>	
15(b)	2 7 11 17	2		B1 for three correct	
15(c)	$\frac{3}{20}$ oe	1			
[Total: 76]					