

Question Number	Answer	Mark
14(a)	<p>Determines period from at least 2 cycles [to within 1 square] (1)</p> <p>Converts period into hours (1)</p> <p>$T = 12.0 \rightarrow 13.0$ (hours) (1)</p> <p><u>Example of calculation</u></p> <p>$13T = (6.9 - 0.2) \times 24 \text{ hours} = 160.8 \text{ hours}$</p> <p>$T = \frac{160.8 \text{ hours}}{13} = 12.4 \text{ hours}$</p>	3
14(b)	<p>Period of the tide matches natural period of oscillation of water in the bay [accept references to frequency] (1)</p> <p>Efficient/maximum transfer of energy (into water in the bay) Or Resonance occurs (1)</p> <p>Amplitude (of tide) increases Or There is a maximum amplitude (1)</p>	3
Total for question 14		6