

Mark Scheme Circular Motion Paper Questions **Jan 2002—Jan 2010 (old spec)**

Question 2		
(a)	<p>speed is magnitude of velocity or speed is a scalar but acceleration (or velocity) is a vector ✓ direction changes continuously ✓ velocity is changing ✓ acceleration is rate of change of velocity ✓</p> <p align="right">Q2 Jun 2007</p> <p>or speed is magnitude of velocity or speed is a scalar but acceleration (or velocity) is a vector ✓ force (or acceleration) acts towards centre of circle ✓ force (or acceleration) is always perpendicular to velocity or has no component in direction of velocity ✓ force changes direction of velocity but not its magnitude ✓</p>	max 3
(b)	<p>$\omega (= 2\pi f) = 2\pi \times (78/60) = 8.17 \text{ (rad s}^{-1}\text{)} \checkmark$</p> <p>$F \left(= \frac{mv^2}{r} \right) = m\omega^2 r \checkmark$ gives $r \left(= \frac{F}{m\omega^2} \right) = \frac{0.50}{0.10 \times 8.17^2} \checkmark$</p> <p>$r = 7.5 \times 10^{-2} \text{ m} \checkmark$</p>	4
	Total	7

Jan Bi5 2002 Mark Scheme

Julia Schneider



Jan Bi5 2002 Mark Scheme:

Jan Bi5 2002 Mark Scheme Book Review: Unveiling the Magic of Language

In a digital era where connections and knowledge reign supreme, the enchanting power of language has been apparent than ever. Its power to stir emotions, provoke thought, and instigate transformation is actually remarkable. This extraordinary book, aptly titled "**Jan Bi5 2002 Mark Scheme**," written by a very acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound impact on our existence. Throughout this critique, we shall delve to the book's central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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web jan 1 2000 powell describes displacement chromatography and elution chromatography as the two principal methods for separating lanthanide cations by ion exchange chromatography in displacement chromatography the ions to be separated are first sorbed onto a column of the resin the analyte metals are eluted from the column

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web feb 4 2021 the lanthanides are located on the top row of the two rows of elements found below the main body of the periodic table placing the lanthanides and the actinides the row below the lanthanides below the other elements is just a matter of aesthetics the lanthanides belong to period 6 like cesium barium and hafnium