

Question Number	Answer	Mark																																																
*15	<p>This question assesses a student’s ability to show a coherent and logically structured answer with linkages and fully-sustained reasoning.</p> <p>Marks are awarded for indicative content and for how the answer is structured and shows lines of reasoning.</p> <p>The following table shows how the marks should be awarded for structure and lines of reasoning.</p> <table><tr><td></td><td>Number of marks awarded for structure of answer and sustained line of reasoning</td></tr><tr><td>Answer shows a coherent and logical structure with linkages and fully sustained lines of reasoning demonstrated throughout</td><td>2</td></tr><tr><td>Answer is partially structured with some linkages and lines of reasoning</td><td>1</td></tr><tr><td>Answer has no linkages between points and is unstructured</td><td>0</td></tr></table> <p>Total marks awarded is the sum of marks for indicative content and the marks for structure and lines of reasoning</p> <table><tr><th>IC points</th><th>IC mark</th><th>Max linkage mark</th><th>Max final mark</th><th></th></tr><tr><td>6</td><td>4</td><td>2</td><td>6</td><td>(1)</td></tr><tr><td>5</td><td>3</td><td>2</td><td>5</td><td>(1)</td></tr><tr><td>4</td><td>3</td><td>1</td><td>4</td><td>(1)</td></tr><tr><td>3</td><td>2</td><td>1</td><td>3</td><td>(1)</td></tr><tr><td>2</td><td>2</td><td>0</td><td>2</td><td>(1)</td></tr><tr><td>1</td><td>1</td><td>0</td><td>1</td><td>(1)</td></tr><tr><td>0</td><td>0</td><td>0</td><td>0</td><td>(1)</td></tr></table> <p>Indicative content</p> <p>IC1 There is a very high temperature (in the core)</p> <p>IC2 (So) nuclei/protons have a high <u>kinetic</u> energy</p> <p>IC3 (Sufficient) to overcome electrostatic repulsion</p> <p>IC4 And allow nuclei/protons to get close enough to fuse</p> <p>IC5 Gravitational forces produce a very high density (in the core)</p> <p>IC6 (So) the collision rate is high enough to sustain fusion</p>		Number of marks awarded for structure of answer and sustained line of reasoning	Answer shows a coherent and logical structure with linkages and fully sustained lines of reasoning demonstrated throughout	2	Answer is partially structured with some linkages and lines of reasoning	1	Answer has no linkages between points and is unstructured	0	IC points	IC mark	Max linkage mark	Max final mark		6	4	2	6	(1)	5	3	2	5	(1)	4	3	1	4	(1)	3	2	1	3	(1)	2	2	0	2	(1)	1	1	0	1	(1)	0	0	0	0	(1)	6
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