

Question number	Answer	Notes	Marks								
6 (a) (i)	<p>;;; all four stars in the correct positions = 3 marks any two stars in the correct positions = 2 marks any 1 star in the correct position = 1 mark</p> <table><tr><th colspan="4">Coolest → Hottest</th></tr><tr><td>Antares A</td><td>61 Cygni A</td><td>Vega</td><td>Sirius B</td></tr></table>	Coolest → Hottest				Antares A	61 Cygni A	Vega	Sirius B		3
Coolest → Hottest											
Antares A	61 Cygni A	Vega	Sirius B								
(ii)	Antares (A);		1								
(b)	<p>any three from: MP1. nebula is (cold) cloud of dust/gas; MP2. gravity causes cloud to collapse/eq; MP3. temperature of cloud increases/eq; MP4. creating a protostar; MP5. idea that (main sequence star created when) fusion starts;</p>		3								
(c)	<p>any four from: MP1. idea that hydrogen fusion stops (in core); MP2. core collapses; MP3. core temperature of star increases; MP4. (star expands to) become a red (super) giant; MP5. surface temperature of star decreases (during red giant phase) MP6. helium fusion begins; MP7. white dwarf formed when helium fusion stops (in core); MP8. idea of rest of star released (as a planetary nebula);</p>	<p>condone idea of hydrogen runs out allow star collapses</p>	4								

Total for Question 6 = 11 marks