Question number	Answer	Notes	Marks
7 (a)	any three of the following: MP1. current increases during first **0.04s**/ to maximum of **0.4A**; MP2. current increase is **linear** /proportionate to time; MP3. (then) current drops for next **0.44s** / by **0.48s**; MP4. current decrease is **nonlinear**; MP5. (final)current constant value is **0.2 A**/ from **0.48s** onwards;	 allow 'at first' for first 0.04s allow 0.5s allow 0.5s	3
b i	0.2 A;		1
ii	V= I R;	accept words or standard symbols	1
iii	substitution; rearrangement; evaluation; unit; e.g. 12 =0.2×R R= 12/0.2 =60 Ω	**accept ecf from bi** independent mark	4
iv	P= IV;	accept words or standard symbols	1
v	substitution; evaluation; e.g. P= 0.2 ×12 2.4 (W)	**accept ecf from bi**	2
c	filament heats up very rapidly (at the start); causing it to melt/ break;	allow wire for filament	2

Total 14 marks