Question number	Answer	Notes	Marks
10 (a) (i)	any three from: MP1. distance is continuous variable; MP2. meter reading is discrete / discontinuous variable; MP3. graph 1 correct for continuous data; MP4. graph 1 better for identifying anomalies; MP5. idea that graph 1 can be used to predict non-tested values; MP6. graph 2 correct if any data is discrete / discontinuous;	e.g. distance for a certain meter reading can be found	3
(ii)	any sensible suggestion; e.g. • read rule at eye level • move rule closer to torch • rule parallel to torch • check for zero error / use a fiducial marker;	ignore references to repeats and precision avoid parallax	1
(iii)	any sensible suggestion; e.g. • zero error • always a small amount of ultraviolet present • change is too small to measure	 allow because of background light ignore background radiation	1
(b)	any four control variables from: MP1. constant {thickness / amount / mass / volume} of sunscreen cream; MP2. constant distance (from torch to meter); MP3. constant ultraviolet light intensity; MP4. same (transparency / thickness of) sheet used each time; MP5. same detector used each time; MP6. constant temperature; MP7. constant background light level;	 allow constant distance from sheet to torch / meter allow same torch, constant power of the torch / eq.	4

Total for question 10 = 9 marks