

Question number	Answer	Notes	Marks
1 (a) (i)	idea of rubbing / friction; with another insulator;	allow <b>suitable</b> named insulator e.g. duster, cloth, hair etc.	2
(ii)	C (-0.0052 C);  A is incorrect because this is equivalent to -520 mC B is incorrect because this is equivalent to -52 mC D is incorrect because this is equivalent to -0.52 mC		1
(iii)	A (the rod has gained negatively charged electrons);  B is incorrect because electrons are not positively charged C is incorrect because this would make the rod positively charged D is incorrect because electrons are not positively charged		1
(iv)	suitable method of demonstrating;          correct observation;	e.g. <ul style="list-style-type: none"> <li>• place rod on electroscope</li> <li>• place rod near stream of water from a tap</li> <li>• place rod near hair</li> <li>• place rod above small pieces of paper</li> <li>• place rod near another (charged) rod</li> </ul> e.g. <ul style="list-style-type: none"> <li>• leaf on electroscope deflects</li> <li>• water moves towards rod</li> <li>• hair moves towards rod</li> <li>• paper moves towards rod</li> <li>• rods move towards/away from each other</li> </ul>	2
(b) (i)	photocopiers / inkjet printers / smoke precipitators / (electrostatic) spray painting;	allow any correct use	1
(ii)	risk of a spark; (causing) explosion / fire;		2

Total for Question 1 = 9 marks