Question number	Answer	Accept	Reject	Marks
1 (a) (i)	unsaturated			1
(ii)	**M1** - (unsaturated) colourless **IGNORE** clear/transparent/looks like water	no colour	discoloured	1
	M2 - (saturated) orange	yellow / brown and any combination	any other colour either on its own or in combination with an accepted colour	1
(iii)	addition			1
(b) (i)	A			1
(ii)	C **and** D	C , D	C or D	1
(iii)	each colouring has a different mixture/combination/patterns of dyes IGNORE references to different heights / distances and solubilities.	Spots / dots for dyes		1
			Total	**7**

Question number	Expected Answer	Accept	Reject	Marks
2 (a)	bar drawn at height of 32 bar drawn at height of 8 bar drawn at height of 62-64	2 marks for all 3 1 mark for any 2 horizontal lines at correct heights vertical lines ending at correct heights		2
(b)	**M1** - capric <u>AND</u> palmitic solid **M2** - formic liquid	S l	any other state symbols	1 1
			Total	**4**