Question	Answer	Mark	Guidance
3(a)	(using) microtubules / tubulin / motor proteins ✓	1	**ALLOW** kinesins / dyneins / 'moto' proteins **IGNORE** spindle fibres, centrioles
3(b)	**1** goblet cells, secrete / release / make / produce / form, mucus ✓ **2** mucus traps, pathogens / microorganisms / bacteria ✓ **3** ref. phagocytes / neutrophils / macrophages / lysozyme ✓ **4** cilia / ciliated cells / ciliated epithelium, sweep / brush / waft / move / AW, mucus ✓ **5** cytoskeleton / microtubules / tubulin, move(s) / make(s) up, the cilia ✓	4 max	**IGNORE** excrete **ALLOW** named example of a lung pathogen **IGNORE** cilia trap, pathogens / microorganisms **ALLOW** 'cillia' / other spelling that looks and sounds same **DO NOT ALLOW** cilia cells

Question	Answer	Mark	Guidance
3(c)(i)	(stage) **2** (should say), non-self / not self / foreign ✓ (stage) **5** (should be) before **4 / 4** (should be) **after 5** ✓	2	**ALLOW** quote to replace stage number **2**, e.g. *'phagocytes recognise pathogens as non-self'* *'phagocytes do **not** recognise pathogens as **self**'* **IGNORE** non-body **ALLOW 4** and **5** are in wrong order / should be reversed / need swapping / should be the other way round / AW **ALLOW** quote to replace stage numbers, e.g. *'phagosome combines with a lysosome **before** stage 4'* *'enzymes from lysosomes digest pathogens **after** stage 5'* *'forms a phagolysosome and THEN destroys the pathogen'* *'phagosome and lysosome do not combine AFTER the pathogen is destroyed'*
3(c)(ii)	minimum of one light chain drawn on outside of heavy chain **and** label to, light (polypeptide) chain / variable region / antigen-binding site ✓	1	**GUIDELINES for drawing:** Light chain should start at tip of arm of Y and be 25–50% the length of the heavy chain. **ALLOW** label line not touching if label written near correct region