

Multiple Choice Answers

Q34: D

Q35: C

Multiple Choice Answers

Q36: A

Q37: C

Multiple Choice Answers

Q34: D

Multiple Choice Answers

Q35: B

6(a)(i)	gene ;
6(a)(ii)	transcribed / template, strand ;
6(a)(iii)	ribosome ; I 70S / 80S
6(a)(iv)	weakens / AW, bacterial <u>cell wall</u> ; cell cannot maintain turgor / AW ; leads to (osmotic) lysis / AW ;
6(b)(i)	flattened cells / AW ; short diffusion distance, (for gas exchange / described) ;
6(b)(ii)	stretch / expand, on inhalation, to prevent alveoli bursting / rupturing / overstretching ; recoil on exhalation to help expel air from the lungs ; <i>if no marks gained, allow one mark for stretch and recoil</i>

4(a)	bronchus ;
4(b)(i)	alveolus ; A alveolar sac / alveolar duct
4(b)(ii)	<u>smooth muscle</u> (cell) ;
4(b)(iii)	any three from: no cartilage ; A no, cartilage rings / C-shaped cartilage A no, irregular cartilage / cartilage plates few / no, goblet cells ; ora trachea / bronchus, have (more) goblet cells thin layer / patches / areas, of smooth muscle ; ecf from (b)(ii) A idea of quantity of smooth muscle less (than in, trachea / bronchus) thin(ner) wall ; (more) convoluted / wavy, lumen lining ; AW e.g. folded / curvy A lumen lining not smooth less, elastic, tissue / fibres, (than, trachea / bronchus) ; AVP ; e.g. ciliated epithelium not, pseudostratified / layered appearance <i>in context of the trachea / larger bronchi</i> no mucous glands present
4(c)	any two from: <i>allow O₂ for oxygen and CO₂ for carbon dioxide</i> systemic circulation (needed) to bring, oxygen / glucose, <u>and</u> pulmonary circulation brings deoxygenated blood ; <i>idea that</i> lungs are location, of gas exchange (surface) / where absorption of oxygen occurs / where excretion of carbon dioxide occurs or pulmonary circulation for, oxygen uptake / carbon dioxide excretion ; cells need, oxygen / glucose, for (aerobic) respiration / for cell metabolism / AW ; R body cells