New questions – 2 part B and 2 part C

Essay 1

Describe the path of a red blood cell from pulmonary artery to the aorta. Include in your answer how the red blood cell changes along the way and how is this going to assist cellular respiration.

How does the structure of the vein enable the blood to be returned to the lungs?

As the blood travels from the heart, to the muscles in the legs and back to the heart the composition of the blood changes. Explain what the changes are, where they occur and why they occur.

Essay 2

The air that we breathe in is significantly different to the exhaled air. Describe the processes that occur bring about these changes.

When the body is exercising it needs to produce more energy. In some cases oxygen isn’t always available. Compare and contrast energy production when oxygen is present and when it is absent.

Short answer 1

Label the diagram of the villi.

How does the structure of the villi facilitate its function?

How does the absorption of proteins differ from that of lipids?

Short answer 2

Label the diagram of the cell.

Why are cells limited to the size they can grow?

Explain how substances can enter and leave the cell.

How does the structure of the cell membrane facilitate these processes?