

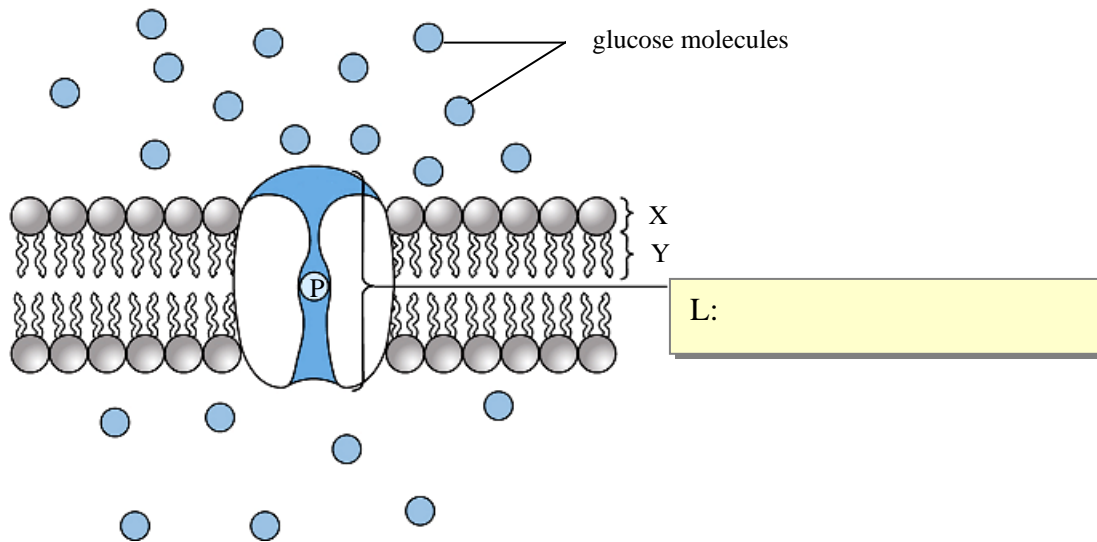


CHAPTER 3: MOVEMENT OF SUBSTANCES ACROSS THE PLASMA MEMBRANE



Paper 2 (Section A – Structured Item)

1. The diagram below shows the fluid model of the plasma membrane.



- (a) i. On the above diagram, name the part labelled L. [1 mark]
- ii. State the function of the part labelled L.
- _____ [1 mark]
- (b) i. On the above diagram, draw an arrow to indicate the direction in which P (a glucose molecule) is moving. [1 mark]
- ii. Explain your answer in (b) i.
- _____
- _____ [2 marks]

iii. Explain the mechanism by which P moves.

[2 marks]

(c) i. The parts labelled X and Y make up one phospholipid molecule. State **one** important chemical property of X and Y respectively.

X: _____

Y: _____

[2 marks]

ii. State **two** properties of the glucose molecule that make it impossible for the molecule to diffuse through the phospholipid molecules.

[2 marks]

(d) Explain how oxygen moves across the plasma membrane.

[2 marks]