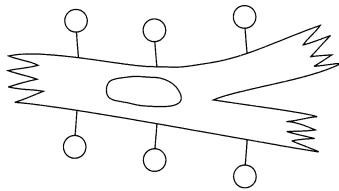


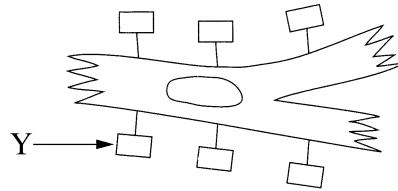
**Question 28** (8 marks)

Organ transplants may trigger an immune response which can lead to organ rejection.

The diagram below represents a model of two heart cells, one from a transplant recipient and one from a donor.



Recipient heart cell



Donor heart cell

- (a) What does Y represent? 1

The donors gene.

- (b) Assess the effectiveness of the model in explaining the cause of organ rejection in a transplant recipient. 3

the model ~~does~~ is not compatible with the recipient thus leading to rejection and cell failure.

- (c) Name and outline the role of TWO types of T lymphocytes in organ rejection. 4

killer T cells and helper T cell both of these cells will try to defend the body and remove all incompatible cells.