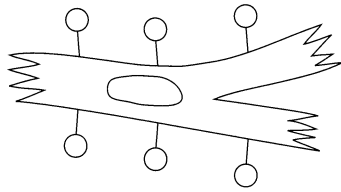


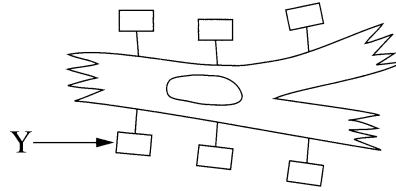
Question 28 (8 marks)

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

a lymphocyte.....

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

The model isn't very effective as it only shows the model, it doesn't actually show how or why the organ is rejected. The process and cause of organ rejection would be better demonstrated through a flow chart diagram.

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

The lymphocytes in organ rejection detect the new organ and then send messages if the organ is functioning properly in the new body. If it doesn't work in the body then a message is sent to the brain.

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