6 A scientist investigated the effect of changes in pH on the activity of two different protease enzymes.

Each enzyme was placed in a hole in the centre of a jelly layer in a Petri dish. The jelly layer was made of protein. The investigation was carried out at a range of different pH values.

After 60 minutes, the area of the jelly layer that had been broken down by enzyme **L** or enzyme **M** was recorded at each pH value tested.

Fig. 6.1 is a diagram of the apparatus.

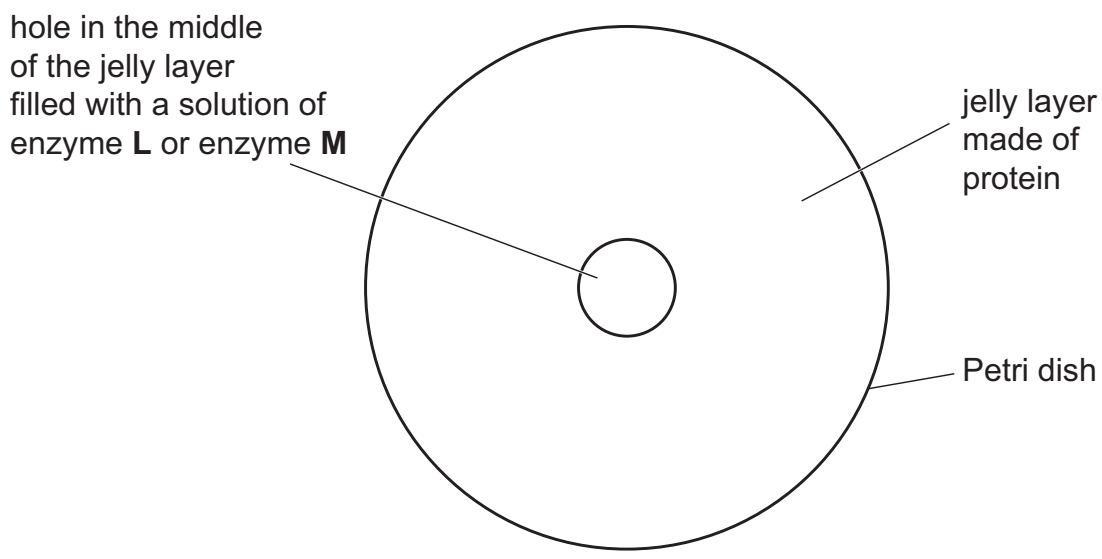

Fig. 6.1

Fig. 6.2 shows the results of the investigation.

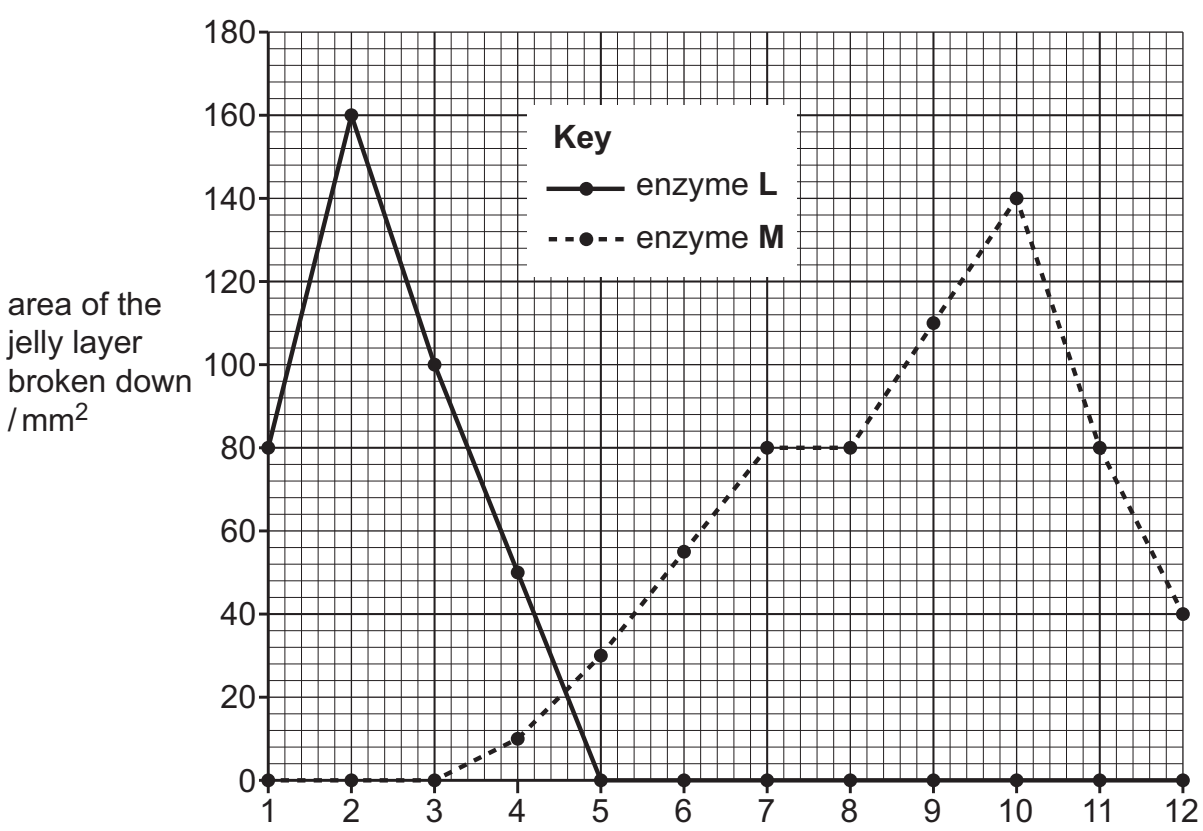

Fig. 6.2

(a) Using the information in Fig. 6.2, describe the results of this investigation.

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(b) Explain the result for enzyme **M** at pH 2 shown in Fig. 6.2.

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(c) Suggest the name of enzyme **L and** state its location in the human digestive system.

name of enzyme **L** .....

location .....
[2]

[Total: 10]