Q1.

Xavier was cycling to school when he fell off his bike into the road. A teacher saw a car swerve, narrowly missing Xavier. The teacher checked Xavier was safe and asked him what had happened.

Xavier was not wearing a helmet. The teacher told him how lucky he was not to have suffered brain damage. She told him about a man who had been cycling without a helmet. He had fallen off his bicycle and now found it difficult to produce speech.

Xavier laughed and said, “I am young. If I had an accident, my brain would just recover on its own and get me back to normal.”

Discuss research into plasticity and functional recovery of the brain after trauma. Refer to the views of the teacher and Xavier in your answer.

You may use this space to plan your answer.

(Total 16 marks)

Q2.

Discuss localisation of function in the brain.

You may use this space to plan your answer.

(Total 16 marks)

Q3.

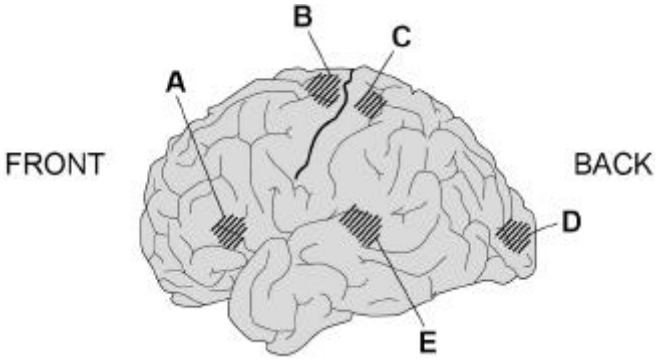
Studies have identified Broca's area and Wernicke's area as responsible for language.

Outline the difference in function between Broca's area and Wernicke's area.

(Total 2 marks)

Q4.

The diagram below shows the left hemisphere of the human brain. Five areas of the brain are labelled A, B, C, D and E.



Using the letters given in the diagram above, correctly identify the areas of the brain to complete the table below.

	Area of brain
Which area is responsible for processing sensations such as pain and pressure?	
Which area processes information such as colour and shape?	
Which area processes information such as pitch and volume?	
Which area is responsible for voluntary movements?	

(Total 4 marks)

Q5.

Outline and evaluate split-brain research.

(Total 8 marks)