Reading Practise

Read the passage below and answer questions 1-7.

The Right and Left Brain

It is common today to identify, in some way, with one side of the brain. You may think, for example, that you are more 'right brain' than 'left'. When we make such statements, we are referring to the fact that the two halves of the human brain deal with information from the senses, and hence the world, in different ways. In general, the left hemisphere is responsible for our processing of language and logic and the right deals with aspects of thought like emotions and spatial relationships. The hemispheres also control our movements, though the left hemisphere controls the right side of our bodies, and vice versa.

The fact that the two hemispheres of the brain work in different ways on different tasks is a relatively new discovery. That discovery was made by a psychobiologist named Roger Sperry and it won him a Nobel Prize in 1981. Sperry uncovered the inner workings of normal brains by studying the brain function of people who had a certain kind of brain damage. In most brains, the two halves are connected by the corpus callosum, a bundle of millions of nerves, which serves as a 'bridge' of sorts between the two hemispheres, allowing them to communicate with each other. The people Sperry studied had had their corpus callosa cut, and because of this, their left and right brains couldn't exchange information.

In a famous experiment, Sperry showed one such subject two pictures. The subject saw a picture of a knife with his right eye (controlled by the left brain) and a picture of a spoon with his left eye (controlled by the right). When asked to name what he saw, the subject said knife, because it is the left brain that deals with language and the naming of things. However, when asked to reach over with his left hand to a nearby table on which was placed both a knife and a spoon, and choose, without looking, the object he saw, the subject chose the spoon. This is because his left eye (controlled by the right brain) saw the spoon and his left hand (also controlled by the right brain) chose this rather than the knife. The subject himself was not at all conscious of the fact that he was seeing and choosing two different objects.

Until recently, it was thought that there was a strict division of labour. Today, however, we are aware that, for example, while the left brain is responsible for most of the language functions, the right brain plays a role in some language functions like following a story and interpreting humour. Tasks such as face recognition require both halves in different ways. Unfamiliar faces are interpreted and processed by the right hemisphere while familiar faces are processed and recognized by the left. Similarly, non-musicians will interpret a melody with their right brain, but musicians will process music with their left.

*Choose the correct letter, **A, B, C** or **D**.*

Write your answer in box 1-7 on your answer sheet.

1) The right hemisphere of the human brain is responsible for
    A. The right side of the body
    B. Language
    C. Emotions
    D. Touch

2) Roger Sperry studied
    A. The corpus callosum
    B. People with abnormal brains
    C. People with normal brains
    D. The connection between vision and touch

3) The corpus callosum
    A. Is only found in abnormal human brains
    B. Is found between the two hemispheres
    C. Is part of the left hemisphere
    D. Is where memory is stored

4) Roger Sperry's experiment shows that
    A. One half of the brain processes language and the other processes touch
    B. People see differently with each eye
    C. The two hemispheres of the brain function in different ways
    D. People are not conscious of the left and right halves of their brain

5) The subject of the knife / spoon experiment
    A. Was not aware that he was seeing two images
    B. Thought the spoon was a knife
    C. Could not tell the difference between a spoon and a knife
    D. Was unable to process visual information accurately

6) The example in the last sentence about musicians demonstrates that
    A. The left side of the brain deals with familiar material
    B. The left side of the brain processes music more efficiently
    C. Musicians are born with more developed left brains
    D. Listening to music requires both halves of the brain

7) Which of these statements is true?
    A. We now know that the left and right brain function similarly
    B. We now know that the left and right brain function completely separately
    C. We now know that the left and right brain may both be involved in a task, though one side may be more involved than the other.
    D. We now know that the left and right brain may both be structurally different.