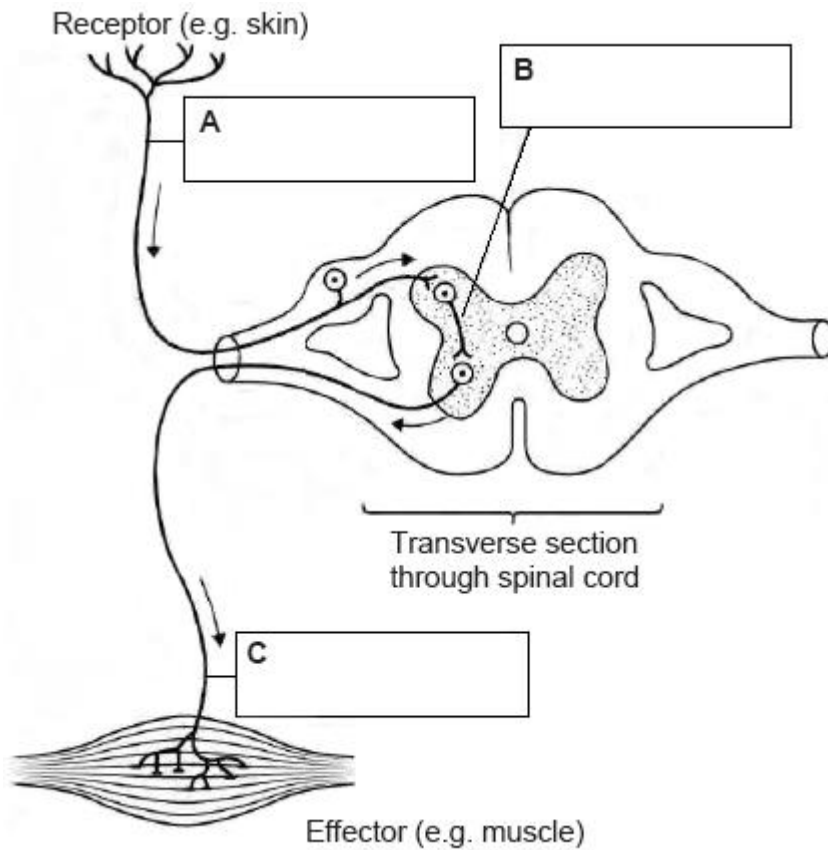


Nervous System – Questions by Topic

Q1.

Name the types of neurons labelled **A**, **B** and **C** on the figure below. Write your answers in the boxes provided.



(Total 3 marks)

Q2.

Information can only travel in one direction at a synapse.

Explain why neurons can only transmit information in one direction at a synapse.

(Total 3 marks)

Q3.

Briefly outline how excitation and inhibition are involved in synaptic transmission.

(Total 4 marks)

Q4.

Martha was telling her friend Sanya about her recent frightening experience.

'I was walking home by myself in the dark. Suddenly, I heard footsteps behind me and I realised that someone was getting closer to me. I saw a bus at the bus stop and decided to run. I don't think I have ever moved with such speed. I leapt on the bus – shaking, sweating and my heart was beating so fast I nearly collapsed.'

Outline the role of the central nervous system **and** autonomic nervous system in behaviour. Refer to Martha's frightening experience in your answer.

(Total 4 marks)

Q5.

Jeremy is digging in the garden. He feels the spade hit a rock and stops digging immediately.

Explain how sensory, relay and motor neurons would function in this situation.

(Total 6 marks)

Q6.

Raoul has recently been prescribed a drug for a mental illness. He looks on the internet to find out more about the drug but he does not understand the phrase 'synaptic transmission'.

Write a brief explanation of synaptic transmission in the brain to help Raoul understand how his drug might work.

(Total 3 marks)