

6.5 Neurones & Synapses

Question Paper

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|------------|-------------------------|
| Course | DP IB Biology |
| Section | 6. Human Physiology |
| Topic | 6.5 Neurones & Synapses |
| Difficulty | Easy |

Time allowed: 10
Score: /5
Percentage: /100

Question 1

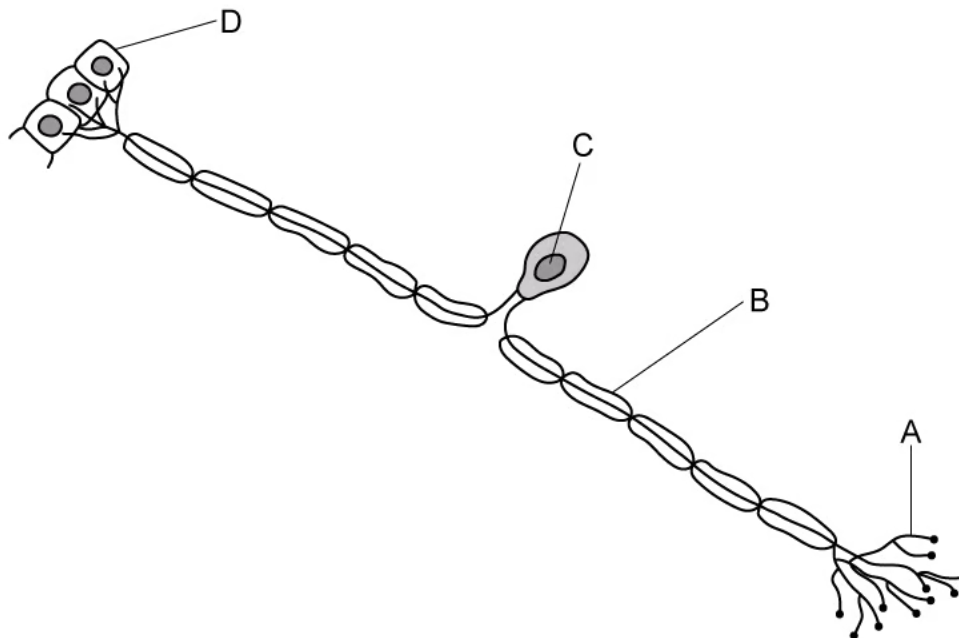
Between which structures do sensory neurones transmit electrical impulses?

- A. From effectors to the central nervous system (CNS).
- B. From effectors to receptors.
- C. From receptors to effectors.
- D. From receptors to the central nervous system (CNS).

[1 mark]

Question 2

Where would myelin be found?



[1 mark]

Question 3

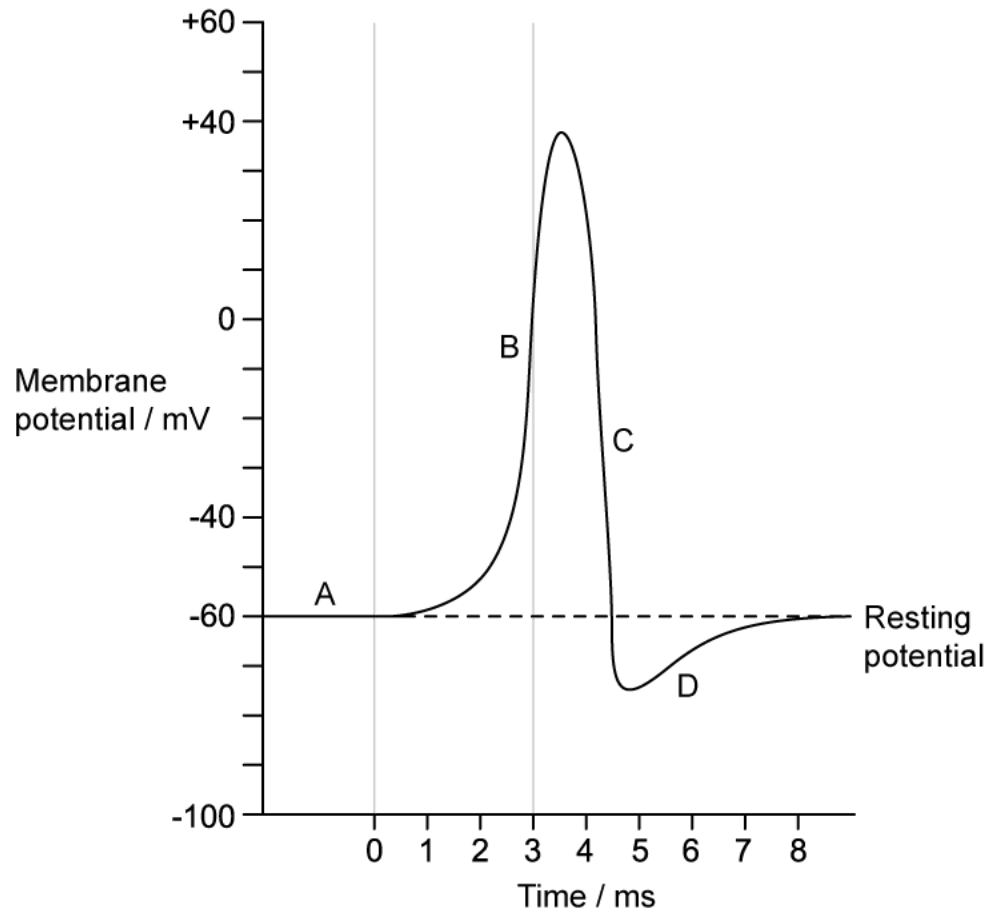
Which event directly results in the production of an action potential?

- A. Diffusion of neurotransmitter across the synaptic cleft.
- B. Fusion of vesicles with the presynaptic membrane.
- C. Membrane potential reaches the resting potential.
- D. Membrane potential reaches the threshold potential.

[1 mark]

Question 4

Identify where depolarisation is occurring.



[1 mark]

Question 5

Neurotransmitters leave the presynaptic neurone and enter the synaptic cleft. After this, they travel across the cleft to a receptor on the postsynaptic neurone membrane.

Identify the processes that are required for this to occur.

| | Neurotransmitters enter synaptic cleft | Neurotransmitters travel across cleft |
|----|--|---------------------------------------|
| A. | Endocytosis | Diffusion |
| B. | Endocytosis | Active transport |
| C. | Exocytosis | Diffusion |
| D. | Exocytosis | Active transport |

[1 mark]