1 **(a)** Fig. 1.1 is a diagram of a sensory neurone.

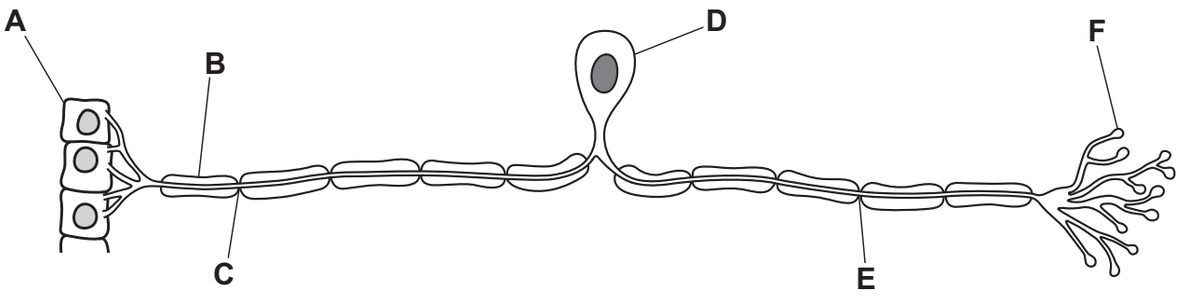

Fig. 1.1

Use the letters **A**–**F** in Fig. 1.1 to identify:

a receptor cell .....

an area where dendron membrane depolarisation occurs .....

a structure that forms a synapse with an intermediate neurone .....

a structure that allows rapid transmission of impulses .....

[4]

(b) Opioid drugs can bind to opioid receptors in the presynaptic membrane of a cholinergic synapse.

Fig. 1.2 is a diagram of a presynaptic membrane with an opioid receptor.

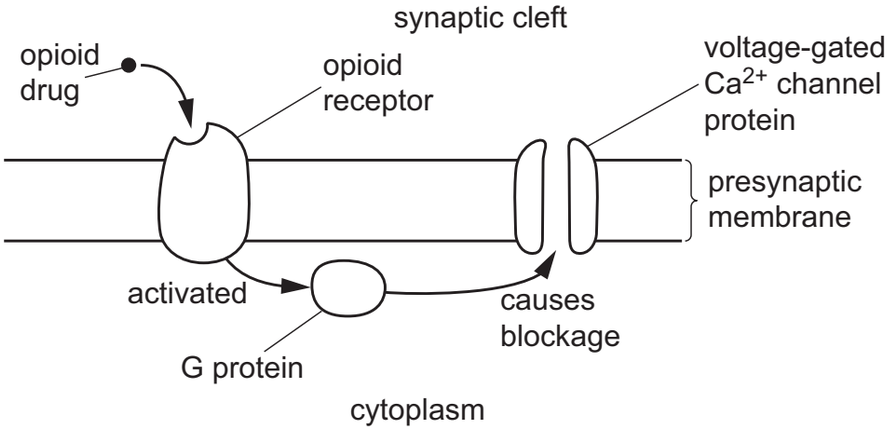

Fig. 1.2

Opioid drugs have an effect on the normal events that occur at a cholinergic synapse.

Suggest **and** explain the effect that an opioid drug will have on the normal events that occur at a cholinergic synapse.

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[Total: 8]