**1 Neurons, Neurotransmission and Communication: Multiple Choice Questions for Students**

1. The peripheral nervous system comprises

* 1. nervous system outside the brain and spinal cord
  2. spinal cord
  3. spinal cord and cranial nerves
  4. sensory and motor neurons

Answer A

2. A movement of the resting potential from –70mV to –85mV would be termed

1. a hyperpolarisation
2. an action potential
3. a depolarisation
4. a threshold point

Answer A

3. What is the membrane potential of a resting neuron?

1. –70mV
2. +70mV
3. –30mv
4. +30mv

Answer A

4. Which neurons direct information away from sensory neurons?

1. interneurons
2. efferent neurons
3. glial cells
4. afferent neurons

Answer B

5. During an EPSP

1. sodium ions enters the cell
2. sodium ions leaves the cell
3. calcium ions leave the cell
4. potassium ions enters the cells

Answer A

6. Neuropeptides are

1. the waste products of neurotransmitter release
2. short amino acid chains that act like neurotransmitters
3. the neurotransmitter of the CNS
4. none of the above

Answer B

7. Electrical stimulation of a neuron at rest will

1. trigger an action potential
2. reduce the membrane potential
3. cause no change in the neuron
4. cause hyperpolarisation

Answer B

8. Schwann cells myelinate

1. all neurons
2. just interneurons
3. axons in PNS
4. axons in the CNS

Answer C

## 9. When the action potential reaches the axon terminal it stimulates the release of neurotransmitter by causing \_\_\_\_\_ to fuse with the axonal membrane.

1. potassium ions
2. calcium ions
3. synaptic vesicles
4. synaptic bouton

Answer C

10. The neurotransmitter molecules travel across the synaptic cleft by

1. active transport
2. electrostatic pressure
3. diffusion
4. sodium potassium pump

Answer C