

## Nervous System

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Time Allowed:** 20 minutes

**Instructions:** Write in the appropriate box what answer you consider to be true after reading each statement. You must only provide one answer per question.

**1) The following statement about the Autonomic Nervous System (ANS) is incorrect:**

- a) Part of the Peripheral Nervous System (PNS)
- b) The ANS is made of the sympathetic and parasympathetic divisions
- c) Works voluntarily
- d) The hypothalamus is the highest control centre of the ANS

**2) The following statement about neurons is incorrect:**

- a) They are electrically excitable
- b) Dendrites are part of a neuron and are the receiving portion of the cell
- c) The cell body contains the nucleus of a neuron
- d) Make up 90% of brain volume

**3) The following statement about action potentials is incorrect:**

- a) A stimulus must reach a threshold of -55Mv to generate an action potential
- b) Repolarisation describes the movement of potassium ions across a cell membrane
- c) During depolarisation, a positive charge builds up inside the membrane
- d) The refractory period describes the period whereby an action potential can be generated

**4) The following statement about Multiple Sclerosis (MS) is incorrect:**

- a) More commonly affects men
- b) Most commonly follows a relapsing-remitting disease pattern
- c) Symptoms include double vision and loss of balance
- d) Defined as an inflammatory de-myelinating condition

**5) The following statement about nervous system pathologies is incorrect:**

- a) Huntington's disease is an autosomal dominant condition
- b) Aluminium toxicity is associated with Alzheimer's disease
- c) Motor Neurone Disease (MND) commonly affects individuals between 50-70 years of age
- d) Guillain-Barre syndrome is associated with damage of the facial nerve

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**6) The following statement about the meninges is incorrect:**

- a) The dura matter is the tough outer layer of the meninges
- b) The sub-arachnoid space is filled with CSF
- c) The pia matter is the thick, middle layer of the meninges
- d) The dura matter is divided into two layers in the brain to create venous sinuses

**7) The following statement is incorrect:**

- a) The blood brain barrier is formed by astrocytes
- b) CSF circulates through cavities in the brain called ventricles
- c) CSF acts as a shock absorber for the brain
- d) The blood brain barrier prevents the entry of lipid-soluble substances into the brain

**8) The following statement about meningitis is incorrect:**

- a) Bacterial infection is generally a more severe cause of meningitis
- b) Patients can experience a rash (petechiae) that disappears when pressing with a glass tumbler
- c) A positive 'kernig's sign' is indicative of meningitis
- d) Diagnosis may be made by a lumbar puncture

**9) The following statement about headaches is incorrect:**

- a) A cervicogenic headache may be worsened by neck movements
- b) Migraines often cause headaches that are retro-orbital (behind the eye)
- c) Headaches can occur as a result of TMJ (jaw) problems
- d) All patients with migraines experience an 'aura'

**10) The following statement about nervous system pathologies is incorrect:**

- a) A contrecoup injury describes damage to the brain at the initial site of trauma impact
- b) Herniated intervertebral discs most commonly occurs between 30-40 years of age
- c) A cerebral contusion describes bruising of the brain
- d) Spina bifida has a significant association with a lack of folic acid before and during pregnancy

**Total Marks Available: 10**