**4 Development and Plasticity of the Brain: Multiple Choice Questions for Students**

1. \_\_\_\_\_ after birth shapes brain development and it is not predetermined by our genetic programme.

* 1. plasticity
  2. experience
  3. environment
  4. all of the above

Answer D

2. Which stage of development continues throughout life?

1. functional validation
2. proliferation of neurons
3. induction
4. differentiation

Answer A

3. Ecto as in ectoderm means

1. inside
2. outside
3. back
4. middle

Answer B

4. During development the basal plate of the spinal cord give rise to which part of the nervous system?

1. sympathetic and parasympathetic nervous systems
2. central nervous system
3. all motor neurons
4. all sensory neurons

Answer A

5. Filopodia use the concentration gradient of chemicals released by the target cell in order to direct them to targets. Which theory does this apply to?

1. chemical print hypothesis
2. chemoaffinity hypothesis
3. chemoprint hypothesis
4. neuroaffinity hypothesis

Answer B

6. The brain is \_\_\_\_\_ when young and becomes more \_\_\_\_\_ as we age.

1. Plastic/static
2. Static/plastic
3. Plastic/stationary
4. Stationary/plastic

Answer A

7. Which condition is associated with Macroencephaly?

1. schizophrenia
2. Alexander's disease
3. William’s syndrome
4. Phenylketonuria (PKU)

Answer B

8. Foetal alcohol syndrome (FAS) is a pattern of mental and physical problems that can develop as a result of the mother consuming

1. too much alcohol during pregnancy
2. not enough alcohol during pregnancy
3. two much alcohol just before getting pregnant
4. too much alcohol while breast feeding

Answer A

9. Degeneration back towards the cell body can sometimes be called \_\_\_\_\_ degeneration.

1. anterograde
2. retrograde
3. reciprocal
4. reversal

Answer B

10. Hematopoietic stem cells form

1. neurons
2. blood cells
3. glial cells
4. astrocytes

Answer B