Homework Questions

The Nervous System & Emotions

- 1) Explain the role and function of the autonomic nervous system. (2)
- 2) Identify the two parts of the body that make up the central nervous system. (2)
- 3) Explain the role and function of the central nervous system.
- 4) Identify the two nervous systems that make up the peripheral nervous system. (2)
- 5) What is the peripheral nervous system made up of? (1)
- 6) Explain the role and function of the somatic nervous system. (2)
- 7) Explain the difference between the sympathetic state and the parasympathetic state. (3)
- 8) Identify two things that happen when the body enters the sympathetic state. (2)
- 9) Explain what happens to the body in the fight or flight response. (4)
- 10)Explain the James-Lange view on emotions. (3)
- 11)Evaluate the James-Lange theory of emotion. (3)

<u>Neurons</u>

- 1) Draw and label a motor neuron. Label the axon, myelin sheath, motor end plate, dendrite, cell body and direction of impulse. (3)
- 2) Explain the role and function of a sensory neuron. (2)
- 3) Explain the role and function of a relay neuron. (2)
- 4) How does a neuron fire a message from one end to the other? (1)
- 5) Explain the processes involved from the nervous system in the 'knee jerk' reaction starting with getting tapped on the knee. (3)
- 6) Draw and label the process of synaptic transmission. Label the direction of impulse, vesicle, neurotransmitter, synaptic cleft, receptor. (3)
- 7) Explain the process of synaptic transmission in words. (4)
- 8) Explain Hebb's theory of learning and neuronal growth. (3)
- 9) Evaluate Hebb's theory of learning and neuronal growth. (3)



<u>The Brain</u>

- 1) Identify the four lobes of the brain. (4)
- 2) Label the location of the: visual cortex, motor cortex, somatosensory cortex, auditory cortex, Broca's area and Wernicke's area. (6)
- 3) Which hemisphere has language ability? (1)
- 4) What connects the two hemispheres of the brain? (1)
- 5) Explain the difference between the function of Broca's area and Wernicke's area. (3)
- 6) Outline and evaluate Penfield's interpretive cortex study. (6)

Brain Scanning

- 1) Name three brain scanning techniques. (3)
- 2) Outline and evaluate one brain scanning technique. (6)
- 3) Explain how modern scanning techniques have improved our understanding of the relationship between brain and behaviour. (6)
- 4) Outline Tulving's 'gold' memory study. (3)
- 5) Evaluate Tulving's 'gold' memory study. (3)