**Biological Perspective Study Guide**

**Outline** principles that define the biological level of analysis



• **Explain** how principles that define the biological level of analysis may be demonstrated in research (that is, theories and/or studies).

• **Discuss** how and why particular research methods are used at the biological level of analysis *(for example, experiments, observations, correlational studies)*.

• **Discuss** ethical considerations related to research studies at the biological level of analysis.

**Physiology and behavior**

• **Explain** one study related to localization of function in the brain *(example=Wernicke, Broca, Gazzaniga and Sperry)*.

• Using **one or more examples, explain** effects of neurotransmission on human behavior *(for example, the effect of noradrenaline on depression)*.

• Using **one or more examples**, **explain** functions of **two** hormones in human behavior.

• **Discuss** **two effects** of the environment on physiological processes

*(for example, effects of jet lag on bodily rhythms, effects of deprivation on neuroplasticity, effects of environmental stressors on reproductive mechanisms)*.

• **Examine** **one** interaction between cognition and physiology in terms of behavior *(for example, agnosia, anosognosia, prosapagnosia, amnesia)*. **Evaluate two** relevant studies.

• **Discuss** the use of brain imaging technologies *(for example, CAT, PET, fMRI)* in investigating the relationship between biological factors and behavior.

**Genetics and behavior**

• With reference to relevant research studies, **to what extent** does genetic inheritance influence behavior?

• **Examine** one evolutionary explanation of behavior.

• **Discuss** ethical considerations in research into genetic influences on behavior.