

Year 11 Biology Semester Two Exam (2009)

Terminology

Biosphere, biodiversity, binomial system, Linnaeus, species, hybrid, population, taxonomy, adaptations, abiotic, biotic, environment, limiting factor, hibernation, stomata, hormones, endocrine system, transpiration, tropism, meristem, phototropism, geotropism, apical dominance, apical bud, lateral bud, circadian rhythm, auxin, ethylene, gibberellins, cytokinins, abscisic acid, dormancy, photoperiod, negative feedback, homeostasis, target cells, specificity, pituitary gland, hypothalamus, neuron, effectors, central nervous system, peripheral nervous system, reflex responses, action potential, nerve impulse, synapse, neurotransmitters, myelin, ectothermic, endothermic, homeothermy, core temperature, insulation, sweating, panting, vasodilation, vasoconstriction, respiration, metabolic heat, behaviour, aggressive, territorial, reproductive, submissive, social, innate learned, communication, habituation, imprinting, associative learning, trial and error learning, observational learning, insight learning, circadian rhythms, dominance, community, ecosystem, detritivores, decomposers, consumers, herbivores, carnivores, omnivores, parasites, producers, autotrophs, heterotrophs, niche, habitat, biome, food chain, food web, mutualism, parasite-host relationship, commensalisms, predator-prey relationship, competition, inter-specific competition, intra-specific competition, photosynthesis, biomass, biomass pyramid, variable, control, hypothesis, replication, biomagnification, carbon cycle, succession.

Focus Areas

1. Understand seven major levels of classification (kingdom, phylum, class, order, family, genus and species) and how these levels show how organisms are related.
2. Be able to use a taxonomic key to identify organisms.
3. Understand the importance of adaptations to the survival of an organism. Revise over the three basic categories of adaptations (structural, functional, behavioural).
4. Understand the roles of plant hormones, such as auxin, and how they bring about different responses.
5. Understand the role of both the endocrine (hormonal) and nervous system in animals in achieving homeostasis. Be able to refer to examples of factors that are under homeostatic control and the importance of specificity in target cells.
6. Be able to interpret a diagram showing negative feedback and how this helps achieve homeostasis.
7. Revise the structure of a neuron and how nerve impulses conduct electrical messages. Also revise the role of synapses and neurotransmitters. Be able to compare and contrast the endocrine and nervous systems.
8. Revise the regulation of body temperature, including behavioural and physiological responses used to help maintain a stable core temperature.
9. Be able to classify behaviour, its function and the methods of communication used between animals.
10. Understand reproductive behavior and some reproductive adaptive strategies used by animals and plants in their development and life cycles.
11. Be able to draw and interpret the role of different organisms in food chains and food webs.
12. Revise and be able to give examples of the different relationships that exist between species, such as mutualism, predator-prey relationships, parasite-host relationships and commensalism, succession
13. Be able to identify factors that affect ecosystem stability e.g. natural disasters, human intervention, competition, bioaccumulation
14. Know the basic equations for photosynthesis and aerobic respiration. Understand the carbon, nitrogen and water cycle.
15. Be able to design an experiment that incorporates the use of a hypothesis, a control and the need for replication and the use of one variable.

Resources

See wiki for resources you have lost. <http://vce-unit1and2biology.wikispaces.com/Home>

Revise over all the Power Points covered in class.

Biozone Worksheets on topics referred to in the "Focus Areas".

Heinemann text Chapters 15-21