

Name _____ Date _____ Period _____

STUDY GUIDE – CHAPTERS 35-40

(excluding chapter 37)

Multiple Choice Topics (65 points)

- root structure/function
- leaf structure/function
- compound/simple leaves
- vascular/non-vascular plants
- apical/root meristems
- apical dominance
- C3 vs. C4 vs. CAM plants
- aquaporins
- properties of water
- water potential (Ψ , Ψ_p , Ψ_s)
- proton pump structure/function
- xylem structure/function
- guttation
- transpirational pull
- stomata/guard cells
- source to sink mechanism
- mycorrhizae
- microsporogenesis/megasporogenesis
- flower structure/function
- alternation of generations in plants
- pollination and fertilization in plants
- fruit structure/function
- sexual vs. asexual reproduction
- grafting (stock/scion)
- phototropism
- auxins, cytokinins, gibberellins, abscisic acid, ethylene
- phytochromes
- animal structure/function
- surface area to volume ratio
- epithelial/connective/muscle tissues
- endocrine/nerve cell communication
- positive/negative feedback
- homeostasis
- endothermy vs. ectothermy
- countercurrent exchange
- basal metabolic rate

Free Response Topics (36 points)

- flower structure/function
- plant structure/function
- experimental design
- endothermy/ectothermy
- transpiration
- scientific method
- water potential (Ψ , Ψ_p , Ψ_s)
- $\Psi = -CRT$ formula (#TBT)

