Plant Test Study Guide

Sections 9.1-9.4

9.1 Transport in the Xylem

 Transpiration – def, purpose factors affecting (potometer and stomata labs)

Properties of water involved

 Xylem properties

 Diagram

 Stomata – characteristics, function, location, factors affecting

 Passive vs active transport

 Overall function

 CAM / Xerophyte adaptations

9.2 Transport in the phloem

 Translocation definition, process, why

 Hydrostatic pressure – definition, relation to translocation

 Source vs sink

 Phloem composition – sieve tubes vs companion cells

 Active vs passive transport

 Xylem vs phloem diagram – similarities/differences

 Aphids

9.3 Growth in plants

 Meristems – definition, types, need

 Plant hormones – source, functions

 Tropisms – definition, types, process

 Phototropism – detailed explanation of what it is and how it happens

 Auxin in root vs shoot

Micropropagation

9.4 Reproduction

 Flowering and gene expression

 LDP vs SDP – definition, Pr vs Pfr explanation (detailed)

 How to induce out of season flowers

 Flower diagram

 Pollination vs fertilization - role of mutualism

 Seed – formation, germination, dispersal

 Diagram