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