Introduction to Horticulture
Review #4

Soils

What are the components of a typical soil?
Be able to differentiate between Horizon A, B and C.
Know how soils are formed.
What causes compaction and how is it corrected?
Define soil texture and how is it calculated?
Explain what needs to be added or done to a soil to change its drainage.
What is an acid, base, neutral and pH?
Define: chelate, hardpan, compost, humus, clay, sand and silt (size).
What is Field Capacity and Wilting Point?
Be able to identify the percentages of organic and inorganic matter, water, and air spaces in a typical soil.
How do sand, silt and clay influence a soil?
How does pH influence a nutrient availability?
What is a salt? How does it affect plants?

Fertilizers

Define micro and macronutrients.
Be able to name the elements in the macronutrient and micronutrient groups.
Define single and multiple nutrient analysis.
Name and define organic type fertilizers

Environmental Factors

How is light intensity measured? What is range for shade, partial sun and full sun light?
What light do plants need to maintain proper health?
What is the ideal temperature difference between day and night?
Define phototropism, photoperiodism, photosynthesis, respiration and transpiration.
Be able to differentiate between fluorescent, incandescent and plant growth lights.
Define foot-candle, evapotranspiration, chlorosis and necrosis.
What are the effects of low and high light?
Pests

Mice, gophers, rabbits, hares, squirrels, deer, birds, snails, and slugs. Traps, baits, chicken wire, raised bed. Know the life history of insects. What type of mouth parts, body parts, number of legs and wings? Know the type of insect metamorphosis (simple and complex).

Diseases

Define parasitic agents: virus, bacteria, fungi, nematode, vascular plants. Non-parasitic agent: pollution, excess of water, light, fertilizers, etc. Define gall, wart, canker, mold, honeydew, sooty mold, powdery mildew, damping off, and wilting.

Pesticides

Know the toxicity range and hazard words of the LD50 table. Danger, Warning, Caution, Keep out of the reach of children. Natural: sulfur, oils. Botanical: nicotine sulfate, pyrethrum, and rotenone. Biological: lady bird beetle, preying mantis, lace wings, ant lion. Synthetic: Chlorinated hydrocarbon (DDT); Malathion; Diazinon