

Hydroponics I

Assignment 3

This is just a cover sheet, turn to the next page to continue.

Assignment 3

Question 1

Compare the differences between an open and closed hydroponic system. (Write about ½ page)

Question 2

List equipment that might be commonly used in hydroponic production of one of the following crops using a system (your choice) which you are familiar with:

- Lettuce
- Tomatoes
- Strawberries
- Cut Flower Roses

Question 3

Briefly explain the differences between each of the following hydroponic systems:

- NFT
- Aeroponics
- Aggregate culture
- Rockwool
- Manual systems
- Automatic systems.

In your answer describe the advantages and disadvantages of each system, the likely problems you might encounter with each, and indicate the varieties of plants suited to each system. (Write up to 2 pages; and no more than 800 words).

Question 4

Based on the information collected in Set Task 2, compare alternative equipment used in hydroponic systems, including:

- Two types of pH meters
- Two types of EC meters
- Three types of NFT channel
- Two types of nutrient tanks
- Two types of pumps
- Two types of controllers.

(Write 2 or 3 sentences for each piece of equipment)

Question 5

Design a system in as much detail as you can (if you wish choose one of the three situations outlined in the set task).

Present a list of all materials required to construct this system. Present sketch plans of how it would be built. Include a list of costs involved in building the system (as best as you can determine).