General Introduction:

Definition of Horticulture

Branches: Pomology, Olericulture, Floriculture, landscape Horticulture, Horticultural Engineering etc.

Ornamental plant industry: prospects and problems

B. Hedges/ Screens: All plants in this category are well foliage from the ground to up, able to provide a dense separation or screen in a landscape. Some are knee-high shrublets good for edging or to demarcate boundaries, walkway or path; at the other extreme are shrubby trees that grouped closely, can block objectionable view or direct the eye to a garden focal point. They are able to tolerate shearing into formal hedges or as informal hedges. A hedge plants should have good branching ability, evergreen, perennial and be easily controlled. Examples: *Codiaeum variegatum, Murraya paniculata, Durranta repens, Ixora javanica etc*

C. Foundation plants: They are plants established next to the foundation of the building. They provide transition from house to garden by hiding the unattractive house foundation. Examples: *Euphorbia splendens, Setcreasea purpurea, Canna indica, Ixora hybrids, Euphorbia tithymaloides/ Pedilanthus tithymaloides etc*

D. Ground covers: They are plants that generally adorn and complement the greenery of the lawns / grasses established to protect and preserve the soil or base line of an environment. The best known ground cover is lawn and it unsurpassed as a surface to work or play upon. But where foot traffic is not important or not wanted many other ground cover plants can offer much of a lawn's neatness and uniformity with considerably less maintenance. Choices of ground cover run the gamut of foliage textures and colours or production of colourful flowers. Pattern planting can be made using different ground cover to contrast pleasantly with one another. Most ground covers function as barriers in the landscape, rather than as the green bridge between areas

a lawn provides. Examples: Begonia rex, Alternanthera bettzickiana, Catharanthus roseus, Portulaca grandiflora, Caladium bicolor etc

E. Ornamental Shrubs: Shrubs are woody plants that usually increase in size by growing new wood from older wood as well as by extending new stems from the plant's base. Unless specially trained, a shrub will have several stems that rise from ground level or close to it. Shrubs are low growing trees usually used as meadows and ornamental spot plants in an environment; they range from ankle-height Lilliputians to multi-stemmed Gullivers you can actually work under. Examples: *Nerium oleander, Thevethia peruviana, Mussaenda philippica, Cassia corymbosa, Caessalpinia pulcherima etc*

F. Trees in Landscaping: Though no distinct line separate a tree from a shrub, except that a typical tree grows a single trunk, rising from the ground and branches out higher up. There are trees that reach a maturity at 15 feet tall, but some shrub reach up to 20 feet. Some of these shrubs serve as some trees, particularly if the lower branches are removed. Therefore, a tree is a large, woody plant having one or several trunks topped by a foliage canopy. The arborist defines trees as 'Single-trunked woody plants attaining a height of at least 200 feet'. Tall growing plant species for shade provision (flame of the forest, etc.), avenue plantings (Cassia fistula), ornamental plants (Tabebua rosea), fruit trees (Mango or Citrus, etc.), wind breaks (eucalyptus, teak, etc),

G. Lawn grasses: Lawn or turf usually refers to area of land planted to grasses that is kept close cut and smooth. Such grasses or creeping legumes are perennial plants to ensure a complete cover of the ground as desired in places like residential /private lawns, parkways, rood sides, golf courses, sporting fields etc.

A lawn is a small to medium sized area of land planted to intensively managed grass and valued for its beauty and environmental effects.

A turf is a large expanse of land planted to intensively managed grass and used for recreational purposes such as golfing, horse racing, soccer etc.

Ordinarily ornamental grasses are many. However in Nigeria few are commonly used. For example,

Bahama grass (*Cynodon dactylon*) is a low maintenance grass and takes a lot of abuses like trampling, driving on it and still survive etc. Predominantly all football pitches are established with bahama grass and lawns generally on large areas. It is the cheapest of grasses used in Nigeria in terms of establishment and maintenance cost.

Method of establishment: establish with the aids of stolons. Get stolon usually uprooted with soil. The nodes are covered with soil and leave green leaves uncovered. They can be cut in to pieces and planted at regular spacing of 45 cm between rows and 15 cm within rows. Continuous planting consume more grasses but get established very easily.

Maintenance: After planting water profusely, then apply fertilizer or manure after emergence/establishment and mow occasionally. Watering frequencies may be high during the dry season to keep the lawn green

Carpet grass (*Axonopus compresus*): Utility for carpet grass is different, usually it grow well in area with high soil water table. It grow faster and produce seeds frequently than bahama grass. Mostly used in medium maintenance situation.

Method of establishment: establish with the aids of stolons and seeds. Get stolon usually uprooted with soil. The nodes are covered with soil and leave green leaves uncovered. They can be cut in to pieces and planted at regular spacing of 45 cm between rows and 15 cm within rows.

Continuous planting consume more grasses but get established very easily. If available and ground adequately prepared establishment using seeds is better and less expensive.

Maintenance: To keep it beautiful watering, mowing and fertilizing must be frequent than as found in bahama grass.

Zoysia grass (*Zoysia tennuifolia*) : It is a widely used in important areas as those for VIPs and 5 star hotels and so on. It takes long time before covering the ground, but can tolerate shade and still grow luxuriantly. It is expensive than bahama and carpet grasses.

Method of establishment: Zoysia establishment is through rhizomes as it has no conspicuous stolons. Rhizomes should be uprooted with a lump of soil under it to increase it chance of survival. Shovel can be used to uproot and roll as if one is rolling a carpet (sodding method). The lump can also be cut in to sets (plugs) or pieces (sprigs) before planting.

Maintenance: It requires high and regular maintenace