

**Bago University**  
**Department of Botany**  
**Second Semester Examination, September, 2019**

**Second Year (B.Sc.)**  
**Botany Specialization**  
**Answer All Questions**

**Bot.2109**  
**Horticulture**  
**Time allowed: (3) Hours**

**I. Determine whether each statement is TRUE or FALSE.**

**(10 marks)**

1. Forestry is a discipline that concentrates on tree that grow in a forest.
2. Wetland plants tolerate continually moist soil condition of a bog or a pond.
3. Pruning and training are ways controlling the reproduction of a plant physically.
4. The new leaves that develop may be smaller but fewer than the removed leaves.
5. Any physiological process is influenced by growth regulators.
6. In particular, cytokinin is synthesized in tissues undergoing senescence or ripening.
7. The light duration also influenced on plant growth .
8. Shaker room must be provided with a well lighted air-ventilated room.
9. In cacao, the flowers are borne in the structure called "cushion".
10. Landscaping can transform a simple structure into an attractive one..

**II. Write correct word to complete the following sentences.**

**(10 marks)**

1. Grapes are produced in vine-yards in a process called -----.
2. Hardiness refers to a plant's tolerance to ----- climatic conditions.
3. CK biosynthesis is through the biochemical modification of -----.
4. Lightduration, i-e., from dawn to dusk technically known as the -----.
5. ABA synthesized from mevalonic acid in mature ----- in response to water stress.
6. Coconut and tamarind can tolerate a certain degree of -----.
7. Separation is ----- using naturally detachable organs.
8. The cleft graft, bark graft, and notch graft are used in ----- graft.
9. Cold storage is used for onion, ----- and imported fruits.
10. Beauty follows from given attention to the principle of -----.

**III. Answer all questions.**

**(10 marks)**

1. Draw the branches of horticulture based on the crop groups?
2. Name the external factors on plant.
3. Classify the horticultural plants on the basic of their optimum temperature requirements.
4. What is meant by mount layering?
5. Describe the edging plan for the right plants.

**V. Answer all questions.**

**(20 marks)**

1. Classify the plants by ecological adaptation and explain any four types.
2. Briefly explain natural size effect on growth and development.
3. Answer the marcotting or air layering from macropropagation.
4. Write heat sterilization in secondary processing methods for fruits and vegetables.

**V. Answer any three questions.**

**(30 marks)**

1. Describe the plantation crops and explain with example.
2. Discuss the moisture influences the growth and development of plants and living organisms.
3. Explain that excised the explant and transfer of culture in plant tissue culture.
4. Write detailed account on patch budding and chip budding.
5. How would you discuss on production of coffee and cacao for plantation crops?