



RAJARATA UNIVERSITY OF SRI LANKA
FACULTY OF APPLIED SCIENCES

Bachelor of Science in Applied Sciences
Third Year – Semester I Examination – July/August 2023

BOT 3202 – PRINCIPLES AND PRACTICE IN HORTICULTURE AND
LANDSCAPING

Time: Two (02) hours

Answer FOUR (04) questions only.

1. a) State how the word “bonsai” was derived and the country in which this art was originated. (06 marks)
b) Describe briefly the major steps involved in preparing a bonsai tree. (25 marks)
c) State **eight (08)** advantages of soil-less gardening. (24 marks)
d) Describe briefly any **three (03)** features of an Italian garden. (15 marks)
e) Differentiate between a formal and an informal garden. State, giving reasons which design you would prefer. (15 marks)
f) Name **three (03)** floral preservatives widely used and explain how they help to prolong the vase life of cut flowers. (15 marks)

2. a) Describe, giving examples, the grafting and budding types practiced in improving horticultural plants. (60 marks)
b) Discuss **five (05)** advantages of grafting plants. (30 marks)
c) Give the botanical name of **two (02)** plants widely improved by grafting. (10 marks)

3. a) Describe briefly the following. (40 marks)
 - i. Pruning and training
 - ii. Air plants
 - iii. Trench layering
b) “Pre-harvesting growing conditions affect the vase life of cut flowers”. Justify this statement. (60 marks)

4. “Chemicals are used to alter physiological processes in plants to obtain the desired yield”. Justify the above statement, giving examples. (100 marks)

5. a) State the limitations in horticulture and describe the remedies to overcome them. (70 marks)
b) Describe briefly the ways of improving “tone & colour” and “mobility” in a garden. (30 marks)