



The Open University of Sri Lanka
Faculty of Natural Sciences
B.Sc/ B. Ed Degree Programme

Department	: Botany
Level	: 05
Name of the Examination	: B.Sc. Degree Programme-Final Examination
Course Title and - Code	: Postharvest Technology of Fresh Produce BYU5308/BYE5308
Academic Year	: 2020/2021
Date	: 29th March 2022
Time	: 9.30 a.m. - 11.30 a.m.
Duration	: 2 hours

General Instructions

1. Read all instructions carefully before answering the questions.
2. This question paper consists of **06** questions in **02** pages.
3. Answer any **04** questions only. All questions carry equal marks.
4. Answer for each question should commence from a new page.
5. Draw fully labelled diagrams where necessary
6. Involvement in any activity that is considered as an exam offense will lead to punishment
7. Use blue or black ink to answer the questions.
8. Clearly state your index number in your answer script

1. (a) Postharvest losses of fresh produce are a major problem in the postharvest chain.
List the major causes of postharvest losses of fresh produce.
- (b) Briefly describe how the environmental factors lead to postharvest losses of fresh Produce.
- (c) What are the advantages of reducing postharvest loss?
2. "A variety of preharvest treatments are applied to horticultural crops to maintain quality, reduce disease severity and lengthen the storage life of fresh produce"
Discuss this statement.
3. (a) Describe the factors that users should pay attention to when fresh produce is transported in road vehicles.
- (b) List the disadvantages of rail transport
- (c) Give reasons for high cost and heavy losses in air freight
4. (a) What is meant by "packing house operations"?
- (b) What are the advantages of sorting and grading of fresh produce?
- (c) Explain "curing" and "wax coating" which are specialized treatments applied to certain fresh produce to maintain quality.
5. Discuss the following:
 - (a) Use of recombinant DNA technology to enhance postharvest longevity of fresh produce
 - (b) Ethylene has become a useful tool in commercial fruit ripening due to its stimulatory activity on fruit ripening

6. Write short notes on the following:

- (a) Chemical characteristics that are used to determine the maturity of fresh produce
- (b) Quality assurance procedures maintained during handling of fresh produce

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