

THE OPEN UNIVERSITY OF SRI LANKA

B.Sc./B. Ed. DEGREE PROGRAMME - 2010/2011

BOTANY - LEVEL 05

ASSESSMENT TEST (NO BOOK TEST)

BTU3113/BTE5113- POSTHARVEST TECHNOLOGY OF FRESH PRODUCE

DURATION : ONE (01) HOUR.



DATE : 30th April 2011

TIME: 4.00 p.m. – 5.00. p.m.

No. of Questions – 03

No. of Pages – 05

ANSWER ALL QUESTIONS ON THE SPACE PROVIDED.

01. Fill in the blanks with the most appropriate word/words.

- a) _____ and catechol oxidase enzymes found in the cut end of cut flowers can cause blocking of xylem tissue. This is known as _____.
- b) Majority of cut flowers are harvested at the _____ stage.
- c) Total soluble solids in extracted juice of fruits is measured using the _____.
- d) Two common methods of packing agricultural produce are field packing and _____ packing.
- e) Potassium permanganate is used as an _____ scavenger in modified atmosphere packing.
- f) Active packing slows down microbial decay and extends the _____ of fruits.
- g) Night air cooling is useful for cooling of _____ produce.

- h) Surface coating or waxing of commodities is done mainly to reduce _____ from harvested produce and improve the _____ of produce.
- i) When applying wax to fruits, the wax film must be thin to avoid _____
- j) Curing of storage organs thickens the skin reducing _____ and give protection against _____ and _____ invasion.
- k) Fruits and vegetables which are not suitable for marketing are know as _____.
- l) Immersing fresh produce in boiling water for a short time is known as _____.
- m) The main criteria to consider in designing a package are _____, mechanical properties and _____ and _____ procedures.

02. a) Define the term 'quality' in relation to fresh produce.

b) List the major quality criteria for fresh produce.

- i. _____
- ii. _____
- iii. _____
- iv. _____
- v. _____

c) Briefly describe how climatic conditions influence the quality of fresh produce.

d) State how flesh firmness of fruits is measured to evaluate the quality of fruits.

e) List the quality assurance procedures followed at harvesting to attain good quality fresh produce.

03. a) What is the main aim of 'storage' of fresh produce?

b) Briefly explain the adverse low temperature effects and adverse high temperature effects on fresh produce.

c) List the different methods of storage of fresh produce.

| | | | |
|------|-------|------|-------|
| i. | _____ | v. | _____ |
| ii. | _____ | vi. | _____ |
| iii. | _____ | vii. | _____ |
| iv. | _____ | | |

d) Differentiate between modified atmosphere storage and controlled atmosphere storage.

e) List the effects of low O₂ on post-harvest responses of fresh produce.

f) Explain the following

i. Green life

ii. Organoleptic qualities.

iii. Vapour pressure deficit.

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