

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

B.Sc.(Hons.) Agriculture Summer 2017 - 18 Examination

Semester: 4

Date: 25/05/2018

Subject Code: 20106251

Time: 10:30 am to 01:00 pm

Subject Name: Protected Cultivation and Post Harvest Technology

Total Marks: 60

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.**A. Fill in the blanks. (Each of 1.00 marks)****(10)**

1. In _____ treatment commodity is passed below a shower of diluted chemical.
2. The unit for measuring radiation dose is _____.
3. _____ is the commonest insect in grains during storage.
4. Full form of FAO is _____.
5. In _____ technique where the commodity is left in the field itself in a heap under shade for few days.
6. The capacity of the castor sheller cum winnower is _____ kg /h
7. In chemical storage principal, _____ and _____ chemicals used during storage
8. In sun drying method, a minimum temperature of _____ °F and humidity below _____ percent is best for sun drying
9. The light intensity is measured by the international unit known as _____
10. Vapour heat treatment was developed to the control infections of _____ in fruits before storage.

B. Multiple choice type questions. (Each of 1.00 mark)**(10)**

1. Which neutral detergent use at time of washing before storage

a) Teapol	c) Sandovit
b) Indtron	d) All of above
- 2 Nipro fruit wax for _____

a) Mango	c) Apple
b) Grape	d) Banana
- 3 Life span of covering material of high grade rigid is _____ years.

a) 05	c) 10
b) 15	d) 20
- 4 Which fruits develop natural fruit wax on their surface at the time of maturity.

a) Grapes	c) Citrus
b) Apple	d) All of above
- 5 Air temperatures above _____ are generally not suited for crops in greenhouse.

a) 30	c) 35
b) 40	d) 45
- 6 Which type of designs are used for construction of glass greenhouse

a) Lean to type	c) Ridge and furrow
b) Even span	d) All of above
- 7 Medium scale storage can accommodate up to a _____ tons of stored products.

a) 100	c) 200
b) 500	d) 1000
- 8 In greenhouse, for plant propagation works relative humidity up to _____% is desirable.

a) 80	c) 90
b) 85	d) 95

9 If the greenhouse span is greater than or equal to _____m, truss frames are used.

- a) 15
- b) 25
- c) 20
- d) 30

10 The capacity of the maize sheller is _____ kg of cob/h, if operated by one hp motor.

- a) 500
- b) 250
- c) 350
- d) 200

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Fumigation
2. Greenhouse effect
3. Combine harvester
4. Greenhouse length
5. Winnowing
6. Concave
7. Freeze drying

B. Answer the following. (Any Five)

(05)

1. Differentiate: Grading and Sorting
2. Greenhouse design depends on which aspects?
3. Write covering material with its life span.
4. Draw the chart of cost in greenhouse.
5. Advantages of waxing.
6. Write down any two reference book related to course.
7. Explain greenhouse ventilation

Q.3 Write short notes. (Any five)

(15)

1. Components of greenhouse
2. Fan and pad cooling system with figure
3. Explain material use to build frame in greenhouse.
4. Groundnut decorticator with figure
5. Explain plant response in greenhouse environment
6. Media preparation in greenhouse

Q.4 Attempt any Three/Long Questions/Example

(15)

1. Explain pre-storage treatment
2. What is storage? Write the advantages and classification of storage type.
3. Methods of threshing and types of threshing cylinder with diagram.
4. Classification of greenhouse.