

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE
B.Sc.(Hons.) Agriculture Winter 2018 - 19 Examination

Semester: 4**Subject Code: 20106251****Subject Name: Protected Cultivation and Post Harvest Technology****Date: 21-12-2018****Time: 02:00pm TO 4:30pm****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. Full form of FPO is _____
2. Cold storage is a CA system that can further depress temperature below that of the refrigerator with the aid of _____ gas
3. ECS means _____
4. The unit for measuring radiation dose is _____
5. It is _____ 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. Traditional storage structures include

a) Barn	c) Shelf
b) Pit	d) All of above
2. Nipro fruit wax for apple

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 is/are methods of threshing

a) Rubbing	c) Impact
b) Stripping	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	c) 20
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- b) 25
10 The capacity of the maize sheller is _____ kg of cob/h, if operated by one hp motor.
a) 200
b) 250
c) 350
d) 30
d) 500

Q.2 Do as Directed.

A. Define the following. (Any five)

(05)

1. Greenhouse
2. Combine harvester
3. Fertigation
4. Girder
5. Bracings
6. Sorting

B. Answer the following. (Any Five)

(05)

1. Enlist classification of greenhouse based on shape
2. Explain curing
3. Write the properties of covering materials.
4. Advantages of greenhouse.
5. Differentiate: Even and Uneven span type greenhouse
6. Write constrains in greenhouse.
7. Explain Tefzel T₂ film

Q.3 Write short notes. (Any five)

(15)

1. Pasteurization in greenhouse.
2. Classification of storage type.
3. Cold storage
4. Explain chemical treatment before storage of fruits and vegetables.
5. Groundnut decorticator
6. Waxing

Q.4 Attempt any Three/Long Questions/Example

(15)

1. What is storage? Write advantages and explain types of storage structure.
2. What is greenhouse effect? Explain the factors of plant response to greenhouse environment
3. What is threshing? Write methods of it and explain components of thresher with figure.
4. What is drying? Write advantages and explain methods of drying.