MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END THEORY EXAMINATION
B.Sc.(Hons.) Agriculture

Semester	: VI (New)	Term	: Second	Academic Year	: 2023-24
Course No.	: ENGG 364	Title	: Protected Cultivation and Secondary		
Credits	: 2 (1+1)		Agriculture		
Day & Date	: Wednesday, 24.04.2024	Time	: 14:00 to 16:00 hrs.	Total Marks	: 40

Note :
1. Solve ANY EIGHT questions from SECTION 'A'.
2. All questions from SECTION 'B' are compulsory.
3. All questions carry equal marks.
4. Draw neat diagram wherever necessary.

SECTION 'A'

Q.1 Classify the greenhouses based on shape, utility, construction and covering materials.

Q.2 Enlist the factors responsible for greenhouse environment and explain in brief about temperature.

Q.3 Enlist the properties of ideal covering material for greenhouse.

Q.4 Enlist the different types of mechanical dryers. Write in brief about constructional details and working of Baffle dryer with neat sketch.

Q.5 Enlist the different irrigation methods used in greenhouse. Explain any two important rules of application of irrigation.

Q.6 What is Drying? Write the various advantages of sun drying.

Q.7 Enlist the engineering properties of grain. Explain in brief about shape and size of grain.

Q.8 What are the principles of selection of the material handling machines and conveyors?

Q.9 If initial weight of a paddy sample was 30 g and after drying, the final weight of paddy sample was 26 g as the dry weight. Calculate the moisture content in percentage on wet basis.

Q.10 Write short notes on (Any Two):

1) Greenhouse effect   2) Fan and Pad cooling system   3) Belt conveyer

SECTION 'B'

Q.11 State True or False:

1) Quonset type greenhouse is placed against the side of an existing building.

2) The value of percentage moisture content on dry basis is higher than wet basis.

3) The capacities of bucket elevators may vary from 2 to 1000 t/h.

4) The ideal greenhouse covering material should have a usable life of 5 to 12 years.

Q.12 Fill in the blanks:

1) _____ type greenhouse is constructed on hilly terrain.

2) The dielectric properties of grain depend on its _____.

3) The light intensity is measured by the international unit known as _____.

4) _____ is the angle between the base and the slope of the cone formed on a free vertical fall of the grain mass to a horizontal plane.

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