

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

Semester :	III (New)	Term :	First	Academic Year :	2022-23
Course No. :	ENGG 232	Title :	Protected Cultivation and Secondary Agriculture		
Credits :	2 (1+1)				
Day & Date :	Thursday, 09.02.2023	Time :	09:00 to 11:00 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 Define greenhouse. Give the advantages of greenhouse.
- Q.2 Enlist the different irrigation systems used in greenhouse. Explain in detail drip irrigation system.
- Q.3 Write down different principles for selection of proper conveying system.
- Q.4 Write short notes on (Any Two):
- a) Dielectric method b) Importance of EMC c) Radiation drying
- Q.5 400 kg of wet pigeon pea at 23% moisture content (wb) is dried to 10% moisture content (wb) for milling. Calculate the amount of moisture evaporated in drying.
- Q.6 Describe the working of fan and pad cooling system with a neat sketch.
- Q.7 Discuss the effect of relative humidity and light with reference to micro-climate on greenhouse crop.
- Q.8 Explain tray dryer with proper diagram.
- Q.9 Enlist different types of greenhouse and explain saw tooth type greenhouse.
- Q.10 Enlist different engineering properties of agricultural materials. Explain mechanical property in detail.

SECTION 'B'

- Q.11 Fill in the blanks:
- 1) _____ is a traditional method of drying of crops and grains and probably being followed by farmers, since man has developed the art of cultivation.
 - 2) Light intensity is measured by an international unit known as _____.
 - 3) _____ is a measure of the sharpness of solid material.
 - 4) The moisture content attained by a grain with respect to a set of atmospheric temperature and relative humidity is called _____.
- Q.12 Define the following terms:
- 1) Specific heat 2) Angle of repose 3) Ventilation 4) Fertigation

