



KERALA AGRICULTURAL UNIVERSITY
B.Sc.(Hons.) Forestry 2017 Admission
III Semester Final Examination- January 2019

Fopu.2102

Wood Science and Technology (2+1)

Marks: 50
Time: 2 hours

- I Fill in the blanks (10x1=10)**
- 1 Shrinkage of wood occurs when _____ water is removed from the cell walls.
 - 2 Vertical stacking is employed mostly for drying of _____ woods.
 - 3 Outer layers are permanently set in compression in _____ seasoning defect.
 - 4 _____ and _____ are the examples of highly refractory woods.
 - 5 _____ chemical is most widely used in chemical seasoning.
 - 6 Examples of very light woods having specific gravity below 0.28 are _____ and _____
 - 7 Examples of timbers having characteristic lusture are _____ and _____
 - 8 The force acting on a unit area is called _____ and the deformation per unit measure is called _____
 - 9 The point at which linearity of the curve changes to non-linearity in general stress – strain curve is known as the _____
 - 10 The ratio of stress to strain is known as the _____
- II Write Short notes on any FIVE of the following (5x2=10)**
- 1 Density and specific gravity
 - 2 Vertical Stacking for air seasoning
 - 3 Refractory classes of timbers
 - 4 Cross cut saws
 - 5 Boucherie process of wood Preservation
 - 6 Acoustic properties of wood
 - 7 Durability and treatability classes of timbers
- III Answer any FIVE of the following. (5x4=20)**
- 1 Wood Seasoning and its principles and advantages.
 - 2 Mechanical properties of wood and enlist different mechanical tests for evaluating strength properties of timber. Describe Nail and screw holding test in detail.
 - 3 Seasoning defects and their control with neat labeled diagrams.
 - 4 Importance and needs of wood preservation by enlisting characteristics of ideal preservatives.
 - 5 Different sawing techniques in wood working
 - 6 Dimensional stabilization of wood through surface coating method
 - 7 Kiln seasoning and its advantages over air seasoning. Describe solar kiln in detail.
- IV Answer any ONE of the following (1x10=10)**
- 1 Physical properties of wood
 - 2 Scope of wood preservation in India and different types of wood preservatives.
