

KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Forestry Degree Programme 2015 Admission

IInd Semester Final Examination-August-2016

Cat. No: Fmau.1202

Marks: 50.00

Title: Forest Mensuration (2+1)

Time: 2 hours

I Fill up the blanks

(10 x 1 =10)

1. _____ is the volume of stem measured down to a thin end diameter up to which conversion is usually done and this volume excludes volume of the stump.
2. Local volume tables are based on _____ variable (s).
3. The density of wood in cross section of the stem shows variation with tendency to _____ from pith to cambium.
4. _____ is the weight of the above ground vegetative matter produced per unit area.
5. _____ is the height of the crown as measured vertically from the ground level to the point half way between the lowest green branch and the green branches forming green crown all around.
6. In case of logs lying on ground _____ instrument is easier to use for girth measurement.
7. The improvised calipers work based on _____ method.
8. _____ is the decrease in diameter of a stem of a tree or of a log from base upwards.
9. On sloping ground, the diameter at breast height should be measured on the _____ side.
10. _____ is the Prismoidal or Newtons formula to calculate volume of solid of logs.

II Write short notes on ANY FIVE

(5 x 2 =10)

1. Improvised calipers.
2. Uses of form factors.
3. Single pole method of tree height measurement.
4. Haga Altimeter.
5. Advantages of calipers.
6. Metzgers theory.
7. Measurement of solid volume of fire wood .

III. Explain ANY FIVE of the following

(5 x 4 =20)

1. How to measure height of leaning trees when observer eye level lies between the top and bottom of the tree.
2. How to calculate volume of crops by Hortig method.
3. What is stem analysis? Explain its field work.
4. Elaborate on methods to estimate volumes of standing trees.
5. How to determine age of single trees when standing ? Explain methods.
6. List the standard rules governing breast height measurement.
7. Define form factor ? Explain classes of form factor.

IV. Write essay on ANY ONE

(1 x 10=10)

1. Define volume table? Write classification of volume tables and preparation of general volume table by graphical method.
2. Define increment? Elaborate on types of increment and relationship between CAI and MAI.