KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Forestry. 2014 Admission

IInd Semester Final Examination- August-2015

Cat. No: Fmau.1202   Marks: 50

Title: Forest Mensuration (2+1)   Time: 2 hours

I Fill up the blanks   (10 x 1=10)

1. Average annual increment for any short period

   a) CAI   b) PAI   c) MAI   d)IP

2. The instrument used to measure angle of slope is

   a) Altimeter   b) Clinometer   c) Hypsometer   d) Abney's level

3. The product of form factor and total height of tree is

   a) Form quotient   b) Form class   c) Tree height   d) Form height

4. Volume of the log is calculated by using the formula ·

   a) g/4 x 1   b) g^2/4 x 1   c) (g/4)^2 x 1   d) 2g/4x1

5. On sloping ground ,GBH should be measured on the

   a) Downhill side   b) Up hill side   c) Accessible side   d) None of these

6. Basal area of a tree refers to

   a) Cross sectional area at stem height   b) Cross sectional area at base   c) Cross sectional area at top height d) Cross sectional area at breast height

7. Stem analysis done to determine

   a) Height of a tree   b) Volume of a tree   c) Age of a tree   d) all the above

8. The spread of crown along its widest diameter is

   a) Crown height   b) Crown width   c) Crown diameter   d) Crown length

9. Artificial form factor is also known as

   a) Absolute form factor   b) Breast height form factor   c) Normal form factor   c) Tree form factor

10 Pressler's increment borer is used to determine

   a) Increment of a tree   b) Height of a tree c) Volume of a tree d) Age of a tree

II Write short notes on any FIVE   (5 x 2=10)

1. Metzger's theory

2. How do you measure the height of a leaning tree

3. How will you measure the bark thickness of a tree

4. Partial enumeration

5. Kinds of random sampling

6. Yield table

7. Instruments used in horizontal point sampling

III Write short notes on any FIVE

(5 x 4=20)

1. Differentiate between site quality and site index
2. Concept of horizontal point sampling
3. Sequential sampling
4. Differentiate between total and partial enumeration
5. Differentiate between stem and stump analysis
6. Differentiate between artificial and true form factor
7. Differentiate between MAI and CAI

IV Write essay on ANY ONE

(1 x 10=10)

1. Write about the standard rules governing measurement at breast height
2. Illustrate with neat diagram about the height measurement, employing geometric and trigonometric principles .Give pertinent examples of the instruments based on these principles

****