Safo. 2106
KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Forestry 2016 Admission

III Semester Final Examination-February-2018
Forest Mensuration (2+1)
Marks: 50
Time: 2 hours
I . Fill in the blanks
(10x1=10)
1 One hectare $=$ $\qquad$ $\mathrm{m}^{2}$
2 In India, breast height of standing trees is $\qquad$ m above ground level.
3. Quarter girth volume is $\qquad$ $\%$ of the full circular volume.
4 Chaturvedi ....... and .........LS (2011). Forest Mensuration and Biometry ( $5{ }^{\text {th }}$ Edition). Khanna Bandhu. Dehra Dun 364 pp.
5 Forest mensuration is applied in sale of forest produce, management of forests, research, and $\qquad$

- Define the Following

6 Forest Mensuration
7 Form quotient
8 Taper of a tree
9 Total tree height
10 Sample plot
II Write Short notes on any FIVE of the following
1 Volume table
2 Yield table
3 Metzer's theory
4 Form factor
5 Crown cover
6 Standard stem timber
7 Presslers's increment borer

III Answer any FIVE of the following.
(5x4=20)
1 A teak $\log$ measures 8 m in length and 160 cm under-bark mid-girth. Calculate its commercial volume.
2 How will you estimate the age of a standing tree?
3 What do you understand by biomass? How do we estimate the above-ground biomass of a plantation?
4 What are the sources of error in height measurement?
5 What do you understand by the term height class? What is its applicability in forestry?
6 What is the difference between general, regional and local volume tables?
7 Explain two non-instrumental methods for measuring height of trees.

IV Write an essay on any ONE of the following ( $\mathbf{1 \times 1 0 = 1 0 )}$
1 Estimation of commercial timber volume and firewood volume of a 50 year-old teak plantation in Nilambur due for filling.
2 Importance of CAI and MAI in forestry.

