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

III Semester Final Examination-February-2018

## Forest Mensuration (2+1)

Marks: 50

## Time: 2 hours Fill in the blanks I (10x1=10)One hectare = $\dots m^2$ 1 In India, breast height of standing trees is ....... m above ground level. Quarter girth volume is ...... % of the full circular volume. Chaturvedi ...... and ......LS (2011). Forest Mensuration and Biometry (5<sup>th</sup>Edition). Khanna Bandhu. Dehra Dun 364 pp. Forest mensuration is applied in sale of forest produce, management of forests, research, 5 and ..... **Define the Following** Forest Mensuration 6 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 (5x2=10)1 Volume table 2 Yield table 3 Metzer's theory 4 Form factor 5 Crown cover Standard stem timber 6 Presslers's increment borer 7 Ш Answer any FIVE of the following. (5x4=20)A teak log measures 8 m in length and 160 cm under-bark mid-girth. Calculate its 1

- commercial volume.
- How will you estimate the age of a standing tree? What do you understand by biomass? How do we estimate the above-ground biomass of a 3 plantation?
- What are the sources of error in height measurement? 4
- What do you understand by the term height class? What is its applicability in forestry? 5
- What is the difference between general, regional and local volume tables? 6
- Explain two non-instrumental methods for measuring height of trees.

## Write an essay on any ONE of the following IV

(1x10=10)

- Estimation of commercial timber volume and firewood volume of a 50 year-old teak 1 plantation in Nilambur due for filling.
- Importance of CAI and MAI in forestry. 2

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