



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Sc. (Hons.) Forestry 2015 Admission**  
**VI Semester Final Examination-July 2018**

Wosc. 3209

**Research methods and Instrumentation Techniques (1+1)**

**Marks: 50**

**Time: 2 hours**

**(10x1=10)**

**I Fill in the blanks**

- 1 ICFRE stands for-----
- 2 ICAR Head Quarters is at -----
- 3 Breast height is measured at ----- from the ground level.
- 4 Tree caliper is used to measure-----
- 5 The book "Research - how to plan, speak and write about it" is written by -----
- 6 Aranyam is published by -----
- 7 IFGTB stands for -----

**State True or False**

- 8 Completely Randomized Design is the best suited design for field experiments.
- 9 Optical clinometer is used for measuring tree diameter.
- 10 An experiment becomes unwieldy when the number of replications is too large.

**II Write Short notes on any FIVE of the following**

**(5x2=10)**

- 1 Biomass estimation in forests.
- 2 Advantages of sampling.
- 3 F- Test
- 4 Agro forestry
- 5 Equipments used for soil analysis (Any two).
- 6 Leaf area estimation.
- 7 t - Test.

**III Answer any FIVE of the following.**

**(5x4=20)**

- 1 Methods of estimating vegetational diversity.
- 2 Z- Test.
- 3 Central tendency and dispersion.
- 4 Plant water status.
- 5 Models in agro forestry research.
- 6 Randomized Complete Block Design.
- 7 Scaling techniques.

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

**(1x10=10)**

- 1 Aims and their mandates of five national and five international research institutes for forestry research
- 2 Development of forestry research in India

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