

KERALA AGRICULTURAL UNIVERSITY

B.Sc(Hons.) Forestry. 2012 Admission
VIth Semester Final Examination- July -2015

Cat. No: Wosc.3209

Marks: 80

Title: Research Methods and Instrumentation Techniques (1+1)

Time: 3 hours

I. fill up the blanks / Answer as specified (10 x 1 = 10 Marks)

1. Where is the Headquarters of ICFRE?
2. Expand IWST
3. Where is Institute of Forest Genetics and Tree Breeding located?
4. What is IUFRO?
5. Most commonly used statistical design for a simple containerized nursery experiment is _____.
6. The minimum number of replications for any experiment is _____.
7. Name a nutrient estimated using Flame Photometer.
8. Kjeldahl method is used for estimation of _____.
9. DMRT stands for _____.
10. _____ transformation is used to normalize the data given as percentage (Binomeal variable).

II. write short notes on ANY TEN (10 x 3 = 30 Marks)

1. F test:
2. Differentiate between CRD and RCBD
3. Name the different methods of sampling.
4. Randomization.
5. Forest Ecology and Management. Sacred groves of Northern India by Sushama Jairam, Daniel John Britto and K. Muralidharan Nambiar, volume 71, number 12, page numbers 214-225 in the year 2010. (cite it in the proper form).
6. Objectives of forestry research.
7. Name three international institutes for forestry research.
8. Split Plot Design.
9. Three instruments used for soil sample analyses.
10. Factorial experiments
11. Measurement and scaling techniques.
12. Is it correct to use a line graph to depict the magnesium content of 9 soil samples? If it is not correct, which visual method do you choose?

III. write short essays on ANY SIX (06 x 5 = 30 Marks)

1. Organizational pattern of ICFRE.
2. Tests of significance
3. Latin Square Design
4. Compare between field and lab experiments.
5. Measures of central tendency and dispersion.
6. Advantages of sampling.
7. Local Control
8. Modern trends in forestry research

IV. write essay on ANY ONE (01 x 10 = 10 Marks)

1. Development of forestry research in India.
2. Five important national forestry institutes and their mandates.