

# KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Forestry Degree Programme 2013 Admission

VI<sup>th</sup> Semester Final Examination-July 2016

Cat. No: Wosc.3209

Marks: 50.00

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

Time: 2 hours

I Choose the correct answer (Answer all the questions)

(10 x 1 =10)

1. The allocation of the treatments to the different experimental units in a random manner is known as  
a) Randomization    b) Replication    c) Local control    d) sampling
2. What are the basic principles of field experimentation?  
a) Randomization    b) Replication    c) Local Control    d) all of these
3. Local control is not applied for the design  
a) CRD    b)RBD    c) LSD    d) SPD
4. When there are several factors with different levels to be experimented simultaneously with the same level of precision, which design is most appropriate  
a) CRD    b) LSD    c) RBD    d)Factorial scheme
5. The minimum error degrees of freedom should be atleast  
a) 6    b) 12    c) 18    d)20
6. For the field experimentation the accurate idea of the fertility variation can be had with the help of  
a) Experimental field    b) Uniformity trial    c) coordinated trial    d) All of these
7. Select the most appropriate design when all factors are not of equal importance in experimentation  
a) Augmented    b) Strip plot design    c) LSD    d) Split plot design
8. Indian agricultural statistical research institute is located at  
a) Lucknow    b) Jaipur    c) New delhi    d) Kolkata
9. Walkley and Black's method of organic matter determination allow \_\_\_\_\_ percent recovery.  
a) 54    b) 74    c) 64    d) 84
10. ICRAF is located in  
a) Kenya    b) India    c)Malaysia    d)South Africa

II Write short notes ANY FIVE

(5 x 2 =10)

1. Important international institutes on forestry research
2. Randomization
3. Experimentation
4. Local control
5. Organizational pattern of ICAR
6. Concepts of factorial experiments
7. Flame Photometer

III. Explain ANY FIVE of the following

(5 x 4 =20)

1. Differentiate between RBD and CRD
2. Discuss about measurement and scaling techniques
3. Test of significance –explain
4. Write the role of ICFRE in forestry research
5. Write any two instrument used for soil analysis –explain the principles and methods of working