

# KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Forestry. 2013 Admission  
IV<sup>th</sup> Semester Final Examination- August-2015

Cat. No: Safo.2210

Title: Tree Seed Technology (2+1)

Marks: 50  
Time: 2 hours

I Fill up the blanks

(10 x 1 = 10)

1. Group of vascular plants in which the ovules and seeds are not enclosed (naked seed) within carpel are \_\_\_\_\_.
2. The original geographic area from which seed or other propagules were obtained is known as \_\_\_\_\_.
3. ISTA stands for \_\_\_\_\_.
4. \_\_\_\_\_ test is used for quick estimate of seed viability.
5. Storage of seeds in liquid nitrogen at  $-196^{\circ}\text{C}$  is known as \_\_\_\_\_.
6. Seeds which cannot be dried to moisture content below 30 per cent without injury and are unable to tolerate freezing is known as \_\_\_\_\_.
7. Trees that have proven to be genetically superior by means of progeny testing is called as \_\_\_\_\_ tree.
8. \_\_\_\_\_ sample is used for performing seed quality test in Seed Testing Laboratory.
9. Seed rules was enacted during \_\_\_\_\_ to implement the Seed Act, 1966.
10. IDS refers to \_\_\_\_\_ treatment.

II Write short notes on any FIVE

(5 x 2=10)

1. Differences between angiosperms and gymnosperms with respect to pollination and fertilization

2. Plus tree and Elite tree
3. Seed dressing and seed pelleting
4. Physiological Maturity and Harvestable maturity
5. Seed vigour and seed viability
6. Seed production area
7. Physical and biochemical indices of seed maturity

**Write short notes on any FIVE**

(5 x 4=20)

**III**

1. Explain the establishment and management of seed orchards
2. Briefly explain basic steps in seed extraction and processing of tree species
3. Explain the types and methods of seed collection for tree seeds
4. Explain briefly on methods of drying and factors influencing drying of tree seeds
5. Write briefly on various storage methods for tree seeds.
6. Explain briefly about seed certification standards
7. List out the sections in Seed Act ,1966

**Write essay on ANY ONE**

(1 x 10=10)

**IV**

1. Write an essay on various types of seed dormancy and treatments to overcome seed dormancy
2. Define seed testing .Explain the sampling methods ,types of seed sampling and procedure for testing physical purity ,moisture content and seed germination

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