



KERALA AGRICULTURAL UNIVERSITY
B.Sc (Hons.) Forestry 2015 Admission
IV Semester Final Examination-August-2017

Safo.2210

Tree Seed Technology (2+1)

Marks: 50
Time: 2 hours

I **Fill up the Blanks**

(10x1=10)

- 1 Each ovule is attached to the placenta by a distinct stalk known as -----
- 2 The pollen in gymnosperms is called -----
- 3 Formation of more than one embryo in a seed is -----
- 4 In *Calotropis* the pollen grains of each pollen sac are united together in to a mass known as -----
- 5 Maintaining tissue or seed for the purpose of long term storage at ultra low temperature typically between -190°C and -150°C is called -----

Match the following

- | | | |
|---------------|---|------------------------|
| 6 Carpel | - | Microsporophyll |
| 7 Drupe | - | Seed germination |
| 8 Vermiculite | - | <i>Tectona grandis</i> |
| 9 Vermiwash | - | Megasporophyll |
| 10 Stamen | - | Weedicide |

II **Write short notes on any FIVE**

(5x2=10)

- 1 Seed certification
- 2 Seed production area
- 3 Tetrazolium test.
- 4 Seed storage containers
- 5 Recalcitrant seeds
- 6 PREVAC
- 7 Germination energy and germination value

III **Answer any FIVE**

(5x4=20)

- 1 Pollination and fertilization in gymnosperms.
- 2 Treatments used to break exogenous dormancy.
- 3 Factors affecting seed storage.
- 4 Merits and demerits of immature seed collection.
- 5 Materials and methods used for Seed pelleting.
- 6 Importance of moisture content during seed collection and storage.
- 7 Seed sampling

IV **Write essay on any ONE**

(1x10=10)

- 1 Indirect tests of seed viability.
- 2 Seed handling during collection, processing and storage.
