## KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Ag.Degree Programme 2013 Admission VI<sup>th</sup> Semester Final Examination- August-2016

Marks: 50 Cat. No: Pbgn.3205 Title: Principles of Seed Technology(1+1) **Time: 2 hours**  $(10 \times 1 = 10)$ T. **Define the following:** 1. Sampling intensity. 2. Equilibrium Moisture Content. 3. Off types. 4. Extant variety. Fill in the blanks: \_\_\_\_\_ is the removal of undersized/underweight seeds from seed lot. 5. 6. The amount of \_\_\_\_\_\_ in the seeds is the most important factor influencing seed viability during storage. 7. The seed testing laboratory at \_\_\_\_\_\_ has been notified as Central Seed Testing Laboratory. is known as dipping the seeds in chemicals, soaps and fungicides to kill 8. pathogen. **Multiple Choice:** 9. The designated disease of tomato is b) Soft rot c) Phomopsis blight d) Early blight a) Anthracnose 10. The total duration of protection of field crops under PPV&FRA -2001 c) 15 years d) 18 years b) 12 years a) 9 years (5 x 2=10) II Write short notes on any FIVE 1. Classes of improved seeds 2. Physiological maturity. 3. Patent and patent requirements. 4. ISTA. 5. Synchronization in hybrid rice.

- 6. Types of seed treatment.
- 7. Electrophoresis method of varietal identification.

## III Explain any FIVE of the following

- 1. Describe the principle of forced air seed drying. Explain the properties of air and its effect on seed.
- 2. Briefly explain seed treatment, its benefits and the conditions under which seeds must be treated.
- 3. Describe the important safeguards for maintaining genetic purity during seed production.
- 4. Briefly describe the various forms of protection of intellectual properties and discuss the
- benefits and disadvantages of IPR regime.
- 5. Describe in brief the foundation and certified seed production in Brinjal.
- 6. Give a brief account of various statutory bodies and agencies established in India under Seed Act,1966 and explain the functions of Central Seeds Committee.
- 7. What are the general principles of storage? Describe various types of storages.

## IV Write essay on ANY ONE

- 1. What is seed certification? Mention its objectives and Outline the procedure of seed certification with brief explanation of each step.
- 2. Give a brief account of India's seed policy. Explain key features of Seed Bill (2004) and compare the same with Seeds Act (1966).

## (1 x 10=10)

(5 x 4=20)