



**KERALA AGRICULTURAL UNIVERSITY**  
**B.Sc. (Hons.) Ag.2017 admission**  
**IV Semester Final Examination-August-2019**

Pbgn.2204

**Crop Improvement - II (1+1)**

**Marks: 50**  
**Time: 2 hours**

**I Fill in the blanks (10x1=10)**

- 1 The progeny of single homozygous self pollinated individual is called .....
- 2 *Theobroma* is a Greek word which means .....
- 3 ICAR – NRC for Orchids is located in.....
- 4 Common name for *Indiofera tinctoria* is .....
- 5 The anti-nutritional factor present in fodder sorghum is.....

**State True or False**

- 6 Pleiotrophy results in correlated response for selection between two traits.
- 7 Nobilisation in sugarcane was initiated to improve *S.officinarum*.
- 8 The legume fodder lucerne is a self pollinated crop.
- 9 Cardamom is called Queen of Spices.
- 10 Most of the cultivated banana belong to Eumusa series.

**II Write short notes on ANY FIVE of the following (5x2=10)**

- 1 Differentiate Plantain and Banana.
- 2 Name some mango hybrids with parentage.
- 3 Write a note on Cardamom inflorescence.
- 4 What are the three types of heterosis and how will you calculate it?
- 5 What are the features of quantitative traits?
- 6 Marcoting in Sugarcane.
- 7 Write the scientific names of the following medicinal plants.
  - a Kacholam
  - b Glory Lilly
  - c Indian long pepper
  - d Sarpagandha

**III Answer ANY FIVE of the following (5x4=20)**

- 1 How are Orchids grouped based on habit?
- 2 List the breeding objectives of Tapioca.
- 3 Give an account on the any three breeding methods adopted in pepper and the success in each of the methods.
- 4 Name few wild species of sugarcane and their contribution for crop improvement.
- 5 Steps in pedigree breeding.
- 6 Difficulties encountered in forage crop breeding.
- 7 Ideotype concept.

**IV Write an essay on ANY ONE of the following (1x10=10)**

- 1 What are Qualitative and Quantitative traits? Give examples.Differentiate qualitative and quantitative traits.
- 2 Give a detailed note on different hybridization techniques in mango. .

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