

Cat. No: Pbg.3104

Title: Breeding of Crops (2+1)

Marks: 80.00

Time: 3 hours

I Answer all questions

(10 x 1=10)

1. *Musa paradisiaca* is a \_\_\_\_\_ (auto triploid/auto tetraploid)
2. *Solanum tuberosum* is \_\_\_\_\_ (auto triploid/auto tetraploid)
3. *Triticum aestivum* is (allo hexaploid /auto tetraploid)
4. *Nicotianum tabacum* is \_\_\_\_\_ (auto tetraploid/ allo tetraploid)
5. Sugar cane belongs to the family ( solanaceae/graminae)
6. Dwarfing gene in wheat is \_\_\_\_\_

Expand and write head quarters of the following

7. ICRISAT
8. CRRRI
9. NBPGR
10. IARI

II Write short notes on any TEN questions

(10 x 3=30)

1. WTO
2. Domestication
3. Apomixis
4. TRIPS
5. Acclimatization
6. Breeding objectives in mango
7. Floral biology of coconut
8. Differences between mass selection and pureline selection
9. Dichogamy
10. Double cross hybrids
11. Geographical indications
12. Distant hybridization

III Write short essay on any SIX questions

(6x 5=30)

1. Natural and artificial selection
2. Hardy Weinberg law

- Primary centre of origin
- Polyploids in ornamentals
- Breeding methods in tomato
- Backcross breeding to develop a resistant variety in wheat
- Activities of NBPGR
- Explain the lint quality parameters in cotton

**IV Write essay on any ONE**

(1 x 10=10)

- Write an essay on salient features of PPV and FR Act  
Describe the qualifying attributes for variety registration under PPV and FR Act. What are the main functions of PPV and FR authority
- Explain the three line method of developing hybrids in rice