



K16P 0178

Reg. No. : .....

Name : .....

**Fourth Semester M.Sc. Degree (Regular/Supplementary/Improvement)  
Examination, March 2016  
BOTANY (2014 Admn.)  
BOT4E08 : Crop Improvement**

Time : 3 Hours

Max. Marks : 60

I. Answer **any two** of the following :

(2x8=16)

- 1) Write an account on Plant introduction and acclimatization.
- 2) Discuss on the systems of incompatibility.
- 3) Explain the role of recombinant DNA technology in crop improvement.
- 4) Give an account of plant breeding institutes in India and their major achievements.

II. Answer **any two** of the following :

(2x6=12)

- 5) a) What are genetic resources ? 1
- b) Centers of origin of crop plants. 2
- c) Conservation and utilization of genetic resources. 3
- 6) a) What are nif genes ? 1
- b) Biological nitrogen fixation. 2
- c) Genetics of nitrogen fixation. 3
- 7) a) What are patents ? 1
- b) Patent laws. 3
- c) Patenting life forms. 2

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III. Answer **any six** of the following :

(6×3=18)

- 8) Breeding achievements in cereals
- 9) Biodiversity – international
- 10) Mass selection
- 11) Popular hybrids in coconut
- 12) Male sterility
- 13) Significance of haploids .
- 14) Somatic hybridization
- 15) Mutation breeding.

IV. Answer **any seven** of the following :

(7×2=14)

- 16) Plant breeder rights
- 17) Improved seed
- 18) Resistance breeding
- 19) Clonal selection
- 20) Inbreeding depression
- 21) Domestication
- 22) Gene bank
- 23) Floral biology
- 24) Transgenic plants
- 25) Sustainable agriculture.