

Q.P. Code – 56734

Second Year M.Sc. Degree Examination

SEPTEMBER / OCTOBER 2013

(Directorate of Distance Education)

Botany

**(DPB 540) Paper VIII – PLANT BIOTECHNOLOGY AND
PLANT BREEDING**

Time : 3 Hours]

[Max. Marks : 75/85

Instructions to Candidates :

- 1) *Attempt all questions.*
- 2) *Repeaters shall answer questions from Sections A, B and C only (marks 75).*

SECTION A

1. Answer any **SEVEN** of the following : **7 × 3 = 21**
1. Caulogenesis
 2. Palindrome
 3. Minor gene
 4. Cybrids
 5. Serum
 6. Chasmogamy
 7. Durable Resistance
 8. Genomic library
 9. Hydroxylamine
 10. ICRISAT

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SECTION B

II. Write short notes on any **THREE** of the following : **3 × 8 = 24**

11. Protoplast viability
12. Auxin and cytokinin
13. Restriction enzyme
14. Pedigree method
15. Back crossing

SECTION C

III. Answer any **TWO** of the following : **2 × 15 = 30**

16. Write the scope, importance and centres of biotechnology in India.
17. Explain somaclonal variation giving importance to plant breeding.
18. Discuss the modes of reproduction in crop plants.
19. Write an account of incompatibility and its significance

SECTION D

(This section shall be answered only by freshers having 85 marks as paper maximum, in addition to Section A, B and C)

IV. Answer any **ONE** of the following : **1 × 10 = 10**

20. Explain how hybridoma technology is used in the production of monoclonal antibody.
21. Describe the procedures followed in plant breeding for disease resistance.
