

C 21108

(Pages : 2)

Name.....

Reg. No.....

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2017

(CUCBCSS—UG)

Botany

BOT 6B 15—GENETICS AND CROP IMPROVEMENT

Time : Three Hours

Maximum : 80 Marks

Section A

Answer all questions

Each question carries 1 mark.

1. Name any *two* improved varieties of Rubber.
2. Biofertilisers.
3. NBPGR.
4. Polyploidy
5. What is Genetic variability.
6. Heterosis.
7. Plant quarantine
8. ICRISAT.
9. Root nodule.
- 10 Heterobeltiosis.

(10 × 1 = 10 marks)

Section B

Answer all questions.

Each question carries 2 marks.

11. Mineral stress resistance.
12. Mention the common breeding techniques in Rice.
13. Mention the major activities of KFRRI.
14. Comment on CPCRI and its role.
15. What is documentation and its importance in crop improvement ?

Turn over

16. Mention the importance of making saline tolerant crops.
17. Plant introduction.
18. Breeding achievements in Pepper.
19. How will you manage weeds ?
20. Give an account of biopesticides.

(10 × 2 = 20 marks)

Section C

Answer any six questions.

Each question carries 5 marks.

21. What is plant selection ? Explain different type of plant selection.
22. Explain the genetics of nitrogen fixation.
23. How will you manage crops in salt affected area ?
24. Explain chilling tolerance.
25. Short note on heterosis breeding.
26. How conservation of plant genetic resources is possible? Mention its importance.
27. Short note on heat stress resistance.
28. Explain the genetics of Photosynthesis.

(6 × 5 = 30 marks)

Section D

Answer any two questions.

Each question carries 10 marks.

29. What are hybrids ? Explain the techniques used for making hybrids. Mention its advantages and disadvantages.
30. Write an essay on mutation breeding. Comment on its major advantages over other methods of breeding.
31. Write an essay on crop improvement for insect resistance with its achievements and demerits.

(2 × 10 = 20 marks)