



K18U 0083

Reg. No. :

Name :

VI Semester B.Sc. Degree (CBCSS – Reg./Supple./Imp.)
Examination, May 2018
CORE COURSE IN BOTANY/PLANT SCIENCE
6B12 BOT/PLS : Biotechnology and Crop Improvement
(2014 Admn. Onwards)

Time : 3 Hours

Max. Marks : 40

SECTION – A

Answer **all**.

1. A restriction endonuclease
 - a) Gyrase
 - b) Taq polymerase
 - c) EcoR1
 - d) Helicase
2. Maxim and Gilbert method is for
 - a) DNA cloning
 - b) DNA replication
 - c) DNA separation
 - d) DNA sequencing
3. Plasmid vector
 - a) YAC
 - b) pBR322
 - c) CaMV
 - d) MAC
4. A nanoscaled biomolecule
 - a) DNA
 - b) RNA
 - c) Protein
 - d) All of these

(4×1=4)

SECTION – B

Answer **any eight**.

5. Write about gene mapping.
6. What are selection markers ?

P.T.O.



7. Write a note on Humulin.
8. What is acclimatization ?
9. What are biosensors ?
10. Write a short note on clonal selection in breeding.
11. Write a note on grafting.
12. What are shuttle vectors ?
13. Write a note on Golden rice.
14. What is tissue engineering ?
15. How can we enhance shelf life period of fruits through biotechnology ?
16. Explain "Farmers Right Act".

(8×2=16)

SECTION – C

Answer **any four**.

17. Write about DNA microarray and its applications.
18. Explain how can we improve herbicide resistance in a crop using biotechnology.
19. Write a note on centers of diversity.
20. Explain scope and significance of nanotechnology.
21. Write about gene therapy and targeted drug delivery.
22. Explain social issues associated with GM agricultural products.

(4×3=12)

SECTION – D

Answer **any one**.

23. Explain polyploidy breeding and its applications.
24. Describe agrobacterium mediated genetic transformation.
25. Explain synthesis of cDNA library.

(1×8=8)