1. Final questions on discipline “Agricultural biotechnology
2. Module Plant biotechnology
3. The aim of Plant biotechnology. Basic direction in Plant biotechnology. Cell technologies for receiving important products derived from plant material
4. History of Plant biotechnology
5. The scope of plant biotechnology
6. Describe of protoplast fusion and its use.
7. Characterize plant Tissue Culture Micropropagation technologies of plants. Technology for production of virus-free plants.
8. Show Techniques and major Steps of Tissue Culture?
9. Show applications of the types, Techniques and Process The application of plant tissue cultures
10. Present Seed Culture
11. What is Embryo Culture
12. What is Callus Culture
13. Describe the methods of organ culture
14. What is a Meristem Culture
15. Methods of Fertilization in vitro. Haploid technology
16. What is cell selection?
17. Somatic Hybrids: Strategies | Biotechnology
18. Present the applications of cell culture
19. What is genetically Engineered Plants?
20. Describe a production of doubled haploid (DHs)
21. Show applications of doubled haploid (DHs) in plant breeding?
22. Show the steps of process genetic engineering
23. Characterize molecular cloning steps
24. Describe molecular cloning applications
25. Describe techniques create recombinant DNA
26. Show examples of sexual reproduction: natural
27. Give practical examples of selective breeding
28. Describe the process of hybridization
29. Describe the gene splicing
30. Show practical applications recombinant DNA technology
31. Show examples of genetically modified microorganisms
32. How to use the restriction enzymes to make recombinant DNA
33. Describe the protocol of preparation of vector DNA
34. Describe *the main principles of choice of host organism*
35. For what purpose the vector is used?
36. What is a human artificial chromosome
37. Give practical examples of a bacterial artificial chromosome
38. Describe using bacteriophage and what is a cosmid
39. Give practical examples of yeast artificial chromosomes (YACs)
40. Give practical examples of use of plasmids
41. How to choice the host cells for replication of recombinant DNA
42. Describe **transgenic Animal Creation**
43. Give practical examples of use **Microinjection into the germ line**
44. Characterize **Transgenic Animal Generation** **Examples of Transgenic Animals**
45. Show applications of s**omatic Cell Nuclear Transfer**
46. **Biotechnology Techniques in Animal Breeding**
47. Show in an animal biotechnology eEmbryo transfer What is Embryo Transfer
48. In an animal biotechnology What is Multiple Ovulation
49. **Animal** biotechnology **Artificial Insemination (AI) What is?**
50. **Biotechnology to improve Animal Health**
51. Animal genomics Genomics defines and characterizes
52. How do you understand microbial biotechnology in Foods and Agriculture
53. Show applications of microbial Biotechnology
54. Present Microbial Biotechnology for Molecular Diagnostics
55. Give practical examples genetically Modified microorganisms
56. Give practical examples of use Microbial Biotechnology in Foods and Agriculture
57. Show production of proteins from genetically modified (GM) microorganisms
58. Analyze the main techniques and approaches in microbial biotechnology,
59. Characterize microbial biotechnology in Chemical Industries, show the examples for enzymes, bacterium used commercially to produce amino acids and other materials -
60. Present microbial biotechnology in Medicine and Pharmaceutical Industries
61. Show the examples of production be rDNA technology, the genes that code for the phytotoxic compound