Home tasks 3. Microbial Biotechnology in Foods and Agriculture

1. Agrobacterium-mediated transformation
in which the transfer-DNA (T-DNA) contained the coat protein genes from each of the two viruses.
2. Herbicide-tolerance (tolerance to weeds) of agricultural plants eliminates the environmental risk of using the traditional chemical herbicides.
3. Used in the production of fermented foods (eg. beer, wine, bread etc.)
4. Used in the production of enzymes and bioactive compounds for medical and pharmaceuticals
5. Used in bioremediation and waste treatment
6. Application of scientific and engineering principles to the processing of materials by microorganisms to create useful products or processes.
7. Microorganisms utilized may be natural isolates, laboratory selected mutants or microbes that have been genetically engineered using recombinant
8. Development of genetically engineered plants with internal resistance to drought, frost, insect pests and infestation
9. Reduction in dependency of plants on chemical fertilizers and identification of alternatives to expensive fertilizers
10. Replacement of dangerous chemical pesticides with microbial pesticides to manage and control the problem of pests
11. Deals with the prevention of deterioration of
processed or manufactured goods, environmental
protection and with waste disposal system.
12. Production of antibiotics by microorganisms,
13. Production of organic acids by microorganisms
14. Production of enzymes by fermentation of natural microbes,
15. Production of laboratory selected mutants or microbes
16.