1. **Biological control refers to:**
   A. Use of chemical pesticides to kill pests
   B. Use of biological methods to control plant diseases and pests
   C. Use of fertilizers to increase crop production
   D. Use of genetically modified plants only (B)
   Explanation : Biological control involves the use of natural organisms or biological methods to control plant diseases and pests.
2. **Excessive use of chemical pesticides causes:**
   A. Increase in soil fertility
   B. Soil and groundwater pollution
   C. Increase in biodiversity
   D. Improvement in ecosystem balance (B)
   Explanation : Chemical pesticides can cause pollution of soil and groundwater and may harm humans, animals, and crops.
3. **Aphids are controlled biologically by:**
   A. Dragonflies
   B. Ladybird beetles
   C. Baculoviruses
   D. Rhizobium (B)
   Explanation : Red and black striped ladybird beetles act as natural predators of aphids.
4. **Mosquito population can be controlled by:**
   A. Trichoderma
   B. Bacillus thuringiensis
   C. Dragonflies
   D. Azotobacter (C)
   Explanation : Dragonflies act as natural predators and help control mosquito populations.
5. **Bacillus thuringiensis (Bt) is used to control:**
   A. Butterfly caterpillars
   B. Aphids
   C. Mosquito larvae only
   D. Plant fungal diseases (A)
   Explanation : Bt produces toxins that help control insect larvae, especially butterfly caterpillars.
6. **Bt cotton is developed by:**
   A. Introducing Rhizobium genes into cotton
   B. Introducing Bt toxin gene into plants
   C. Using chemical pesticides on cotton
   D. Applying fungal spores to cotton (B)
   Explanation : Bt cotton is produced by transferring the Bacillus thuringiensis toxin gene into cotton plants through genetic engineering.
7. **Trichoderma is used as:**
   A. Biofertilizer bacteria
   B. Biocontrol fungal agent
   C. Nitrogen-fixing cyanobacteria
   D. Chemical pesticide (B)
   Explanation : Trichoderma fungi are used as biological control agents against plant diseases.
8. **Most baculoviruses used as biocontrol agents belong to the genus:**
   A. Rhizobium
   B. Nucleopolyhedrovirus
   C. Lactobacillus
   D. Azospirillum (B)
   Explanation : Most baculoviruses used in biological control belong to the genus Nucleopolyhedrovirus and are species-specific insecticides.
9. **Symbiotic association of Rhizobium occurs in the roots of:**
   A. Leguminous plants
   B. Cereal plants
   C. Fruit plants
   D. Flowering plants only (A)
   Explanation : Rhizobium forms root nodules in leguminous plants and helps in nitrogen fixation.
10. **Azospirillum and Azotobacter help plants by:**
    A. Producing antibiotics
    B. Fixing atmospheric nitrogen
    C. Controlling insect pests
    D. Producing plant hormones only (B)
    Explanation : Azospirillum and Azotobacter are free-living soil bacteria that fix atmospheric nitrogen and improve soil fertility.