D.K.M. COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE-1

DEPARTMENT OF ZOOLOGY

BIOFERTILIZER PRODUCTION(15SZO4A)

SECTION-A (UNIT-I)

1. Sand
2. Silt
3. Clay
4. Humus
5. Loamy soil
6. Porosity
7. Soil microorganism
8. Alluvial soil

SECTION-B

1. Write an essay on different types of soil
2. Give an account on physicochemical properties of soil
3. Explain different types of microorganisms in soil

SECTION-A (UNIT-II)

1. Azolla
2. Cyanobacteria or blue green algae
3. Rhizobium
4. Symbiosis
5. Biofertilizer
6. YEMA Medium
7. Starter culture
8. Azotobacter
9. Jensen's medium
10. Fogg's medium
11. Nostoc

12. Seed treatment
13. Seedling treatment

SECTION-B

1. Explain about mass production of bacterial biofertilizer
2. Give an account on mass production and utilization of *Cyanobacterial* biofertilizer
3. Write a note on mass cultivation of Azolla and its utilization.

SECTION-A (UNIT-III)

1. Rhizobia
2. Bradyrhizobium
3. Leghaemoglobin
4. Root nodules
5. Fabaceae
6. Legume crop

SECTION-B

1. Describe the symbiotic relationship of nitrogen fixing bacteria with legumes.
2. How will you isolate and identify rhizobia from root nodules of leguminous plants.
3. What is nitrification and how does it occur?

SECTION-A (UNIT-IV)

1. PSB
2. VAM
3. Vesicular Arbuscular Mycorrhiza

SECTION-B

1. Explain the use of VAM Fungi as biofertilizer.
2. Discuss how Phosphate Solubilizing Bacteria plays a role in plant growth promotion.

SECTION-A (UNIT-V)

1. Silty soil
2. Fertile soil
3. Composite biofertilizers

SECTION-B

1. How can we increase the fertility of soil using composite biofertilizer?
2. Discuss about the cost benefit analysis of production and application of biofertilizers.