



**SIDDHARTH GROUP OF INSTITUTIONS :: PUTTUR**  
Siddharth Nagar, Narayanananam Road – 517583

**QUESTION BANK (DESCRIPTIVE)**

**Subject with Code :** PAE (18AG0701)

**Course & Branch:** B.Tech – AGE

**Year & Sem:** II-B.Tech & I-Sem

**Regulation:** R18

**UNIT-I**

1. a) Define Agricultural Engineering. List out the branches of Agricultural Engineering.  
b) Explain about the importance of agriculture in National and Global scenario.
2. Briefly explain about the branches of Agricultural Engineering.
3. a) What are the career prospects in Agricultural Engineering?  
b) Explain different sectors where Agricultural Engineers find employment.
4. Explain about soil fertility classification.
5. a) Differentiate between organic and inorganic fertilizers.  
b) Differentiate between weather and climate.
6. a) What is soil erosion? Explain about different types of soil erosion.  
b) What is the importance of plants in controlling soil erosion?
7. Write about different methods to control soil erosion.
8. a) Define watershed and watershed management. Write about the objectives of watershed management.  
b) What are the steps to be followed in watershed management? Write about the classification of irrigation projects.
9. Briefly explain about the soil properties.
10. a) Explain about the classification of soil water.  
b) Write about soil water constants.

**UNIT-II**

1. a) Explain the type of farm roads.  
b) Write about classification of farm roads.
2. Explain about the stanchion barn with a neat layout.
3. Explain about the wire floored poultry house with a neat sketch.
4. Explain about deep litter poultry house.
5. a) Write about the Morai type storage structure.  
b) Write about the cage house.
6. a) Write about Bukhari storage structure.  
b) Explain about the pusa bin with a neat sketch.
7. Write about the Pit silos and Trench silos.
8. a) What is a greenhouse? What are the advantages of greenhouse?  
b) Write about the classification of greenhouses.
9. Explain about the greenhouses based on shape.
10. a) Explain about the greenhouses based on utility.  
b) Explain about the greenhouses based on covering materials.

### **UNIT III**

1. a) Explain the different sources of farm power.  
b) Explain about the classification of tractors.
2. Briefly explain about the selection of tractors.
3. a) What is tillage and write about the objectives of tillage.  
b) Write about the power tiller.
4. Explain the different types of share and mould board.
5. Briefly explain the different methods of sowing.
6. a) Write about potato planter and sugarcane planter.  
b) What is a seed drill and what are the functions of seed drill.  
c) Write about Zero till drill.
7. Explain the different types of sprayers.
8. a) Write about harvesting.  
b) Explain about reaper and reaper binder.
9. a) Explain about mowers.  
b) What is a sprayer and the write the functions of it. Classify the types of spray.
10. Explain about the intercultural equipments.

**Unit IV**

1. What is Agricultural processing and write about the unit operations in Agricultural processing.
2. What is drying and explain about any two dryers.
3. a) What is packaging and explain the levels of packaging.  
b) Write about the classification of packaging material and the properties of ideal packaging material.
4. Explain about Bucket elevator.
5. Explain about Belt conveyor.
6. Explain about Screw conveyor.
7. Explain about Pneumatic separator.
8. a) What is pasteurisation and explain the different methods of pasteurisation of milk.  
b) What is cleaning? List out the equipments used for separation.
9. What is homogenisation and explain about the homogeniser.
10. a) Write about cold storage room.  
b) What is milk processing and list out the dairy products?

## Unit V

1. a) Explain the different sources of energy.  
b) Explain about the solar thermal energy.
2. a) Explain about the solar photovoltaic energy.  
b) Explain about the types of wind mills.
3. Briefly explain about the Janata type biogas plant.
4. Write about the modification of SI engine on biogas.
5. Write about the modification of CI engine on biogas.
6. Explain about the wind mills used for generating power.
7. Explain about the wind mills used for water pumping.
8. Explain the types of wastes produced in the food processing operations.
9. Explain about KVIC biogas plant.
10. Briefly explain about the Deenabandhu type biogas plant.

Prepared by: **V. LIKHITHA.**