

Syllabus and Sample questions for AEB 2014.

Note that the Syllabus for AEB is same as that of AEA. Sample questions are given below.

1. What is the difference in “Blocking effect” between RBD and LSD trials? In which of the above designs the sources of variation are more controlled? Identify the block effect, if any, in the agricultural experiment described in

2. What are the different indices used to calculate the advantages/disadvantages of intercropping system? What the differences are between inter- and mixed- cropping? State the importance of intercropping in rainfed system.

OR

- i) Define any two of the following soil physical parameters-
- a) Soil Texture
 - b) Soil Structure
 - c) Bulk density
- ii) What is meant by particle density? How is it different from the bulk density of soil?
- iii) Explain the term soil aggregation. What are the various processes that help in formation of soil aggregates?
- iv) What are the type of pore spaces that occur in soil? Explain their usefulness.

3. Write down the differences between:

- i) Transpiration and Evaporation
- ii) Mixed fertilizers and compound fertilizers
- iii) Multiple cropping and Relay cropping
- iv) Consumptive use of water and water requirement of crops

4. What is the dominant pulse crop in India? Write down its climatic requirements and rotations followed with this crop. Name five improved varieties of this crop as also the package of practices.

OR

- i) What do you mean by isomorphous substitution in clay lattice?
- ii) What are the source of constant charges in silicate clays?
- iii) Define soil pH. What are the factors affecting the pH of soil.

5. Define drought. What are the different types of drought? What would be the contingent cropping systems in case of early season drought?

OR

Soil health deterioration is the major second generation problem of “green revolution”. Substantiate the statement with appropriate reasons.