M.Sc. (Ag.) Semester-II Examination 2017
Agronomy
Course : AGR 516
(Principles and Practices of Organic Farming)

Time : 3 Hours **Full Marks : 50**

Questions are of value as indicated in the margin

Answer **any five** questions

1. Explain the following terms with examples (**any five**) : 2×5=10
   (a) Agroforestry (b) Soil biota (c) Trap crops (d) Intercropping (e) Organic manures
   (f) Crop rotation (g) Biofertilizer
2. Explain usefulness of **any four** of the following practices in organic farming: 2.5×4=10
   (a) Stale seed bed technique
   (b) Soil solarization
   (c) Integrated farming system
   (d) Diversified crop rotation
   (e) Pheromone traps
   (f) Rain water harvesting
3. Explain the differences between the following (**any four**) : 2.5×4=10
   (a) Cropping system and farming system
   (b) Aerobic composting and anaerobic composting
   (c) Biopesticides and botanical pesticides
   (d) Arbuscular mycorrhizal fungi and phosphate solubilizing fungi
   (e) Organic farming and natural farming
4. Write short notes on the following (**any four**) : 2.5×4=10
   (a) Organic residues and nutrient recycling
   (b) Principles of organic farming
   (c) Shelter belt
   (d) Biological control of insect pests
   (e) Bioherbicides
   (f) Liquid biofertilizers
5. Define conservation tillage. Explain different types of conservation tillage practices. Enlist the benefits of conservation tillage in relation to organic farming. 2+5+3=10
6. What do you mean by multiple cropping? Explain different types of multiple cropping with examples. Write in brief about the role of relay cropping in relation to organic farming in eastern India. 2+5+3=10
7. What do you mean by organic certification? Why is certification necessary for organic farming? Give a note on status of organic farming in India at present. Briefly explain relevance and future prospect of organic farming in India. 1+2+3+4=10
8. Classify earthworms based on their habitat. Briefly explain the vermicomposting process. Enlist benefits of vermicompost over ordinary compost. 3+4+3=10

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