

**PGDESD-06**

Post Graduate Diploma in Environment and  
Sustainable Development

Examination June, 2015

**Agriculture and Environment**

*Time : Three Hours]*

*[Max. Marks : 100*

**Note:** The Question paper is divided into three sections A, B and C. Write Answers as per given instructions.

**Section-A**

(Very Short Answer Questions)

**Note:** Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks. 10×2=20

1.
  - (i) Describe the migration hypothesis of evolution of agriculture.
  - (ii) What are the basic components of agro-ecosystem?
  - (iii) Mention the factors which influence development of soil.
  - (iv) Mention the formula to calculate sustainable yield index (SYI).
  - (v) Explain the basic principles to control wind erosion.
  - (vi) What is species diversity?
  - (vii) Define ravines.
  - (viii) What is farm pond?

- (ix) Define ecological security.
- (x) Define agri-silviculture.

### Section-B

(Short Answer Questions)

**Note:** Answer any 4 questions. Each answer should not exceed 200 words. Each question carries 10 marks.

4×10=40

- 2. What do you understand by agriculture revolution in England?
- 3. Describe sources and sinks of greenhouse gases.
- 4. Explain the basic principles of flood control.
- 5. Describe the components that constitute biodiversity and how are they measured?
- 6. Differentiate between surface and subsurface drainage in a farm system.
- 7. How do organic farmers fertilize their crops? How do they control pests and weeds?
- 8. Discuss the social and environmental aspects of the issue of food security.
- 9. Make a note on aquaculture in India.

### Section-C

(Long Answer Questions)

**Note:** Answer any two questions. You have to delimit your answer maximum upto 500 words. Each question carries 20 marks.

2×20=40

- 10. Discuss the approaches of sustainable agriculture.
- 11. How does biodiversity contribute to research and development of agriculture to increase food productivity?
- 12. Discuss the policy measures required to boost agriculture productivity and to usher in rural prosperity in the current international trade regime.
- 13. What are GM crops? How are they useful in avoidance of biotic and abiotic stresses in crop plants?