

**POST GRADUATE DIPLOMA IN  
SUSTAINABILITY SCIENCE (PGDSS)**

**Term-End Examination**

00160

**June, 2015**

**MSD-016: STRATEGIES AND MODELS FOR  
SUSTAINABILITY**

*Time : 3 hours*

*Maximum Marks : 100*

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*Note : Answer **all** questions as per the instructions given  
in each question.*

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1. Attempt any **ten** questions. Answer the following questions in about 100 words each. Each question carries 2 marks.  $10 \times 2 = 20$
- (i) What is Environmental Sanitation ? What are its subsets ?
  - (ii) Define Green Agriculture. Give example.
  - (iii) Define Value Addition. Why is it needed ?
  - (iv) What is Anaerobic Digestion ? Briefly explain with example.
  - (v) What is Bio-centre ? Give example.
  - (vi) Define Evergreen revolution. What are its components ?

- (vii) Define Green Infrastructure with suitable example.
- (viii) Define Eco-technology with suitable example.
- (ix) What is DPSEEA framework ? Explain its importance.
- (x) Define Sustainable Development. What are its major pillars ?
- (xi) Define Value-at-risk.
- (xii) Define Waste management. What is 3Rs ?
- (xiii) What is ENVIS ? What are the major criteria for selection of ENVIS centres in India ?
- (xiv) Define Recycling. Why is it important ?
- (xv) What is a Bio-village ? Why is it important in India ?

2. Attempt any *eight* questions. Answer the following questions in about 300 words each. Each question carries 5 marks. 8×5=40

- (i) Distinguish between Market equality and Structural equality.
- (ii) Explain the types of Soft Infrastructure.
- (iii) What is the role of preventive medicine to achieve good health through sustainable approach ?
- (iv) What are the functions of SHGs ?

- (v) What is the difference between gender equity and equality ?
- (vi) What are the existing challenges and perspectives of the Indian health sector ?
- (vii) What are the key elements of cleaner production ?
- (viii) Explain the SWOT analysis of food process industry.
- (ix) What are the principles involved in the identification of organic agriculture ?
- (x) Describe the goals of sustainable value addition.
- (xi) What is the role of Biovillage technologists in the demystification of mushroom production ?
- (xii) Briefly explain about one-straw revolution.

3. Attempt any *four* questions. Answer the following questions in about 500 words each. Each question carries 10 marks.  $4 \times 10 = 40$

- (i) Define GIS and explain its essential components.
- (ii) Explain the guiding principles to start VKC.

- (iii) Explain the following :
- (a) Biocomposting
  - (b) Biomass Briquetting
  - (c) Bioprospecting
  - (d) SWEET
  - (e) Vermicomposting
- (iv) Explain the life cycle assessment of the resource.
- (v) Briefly explain the ecological foundations of eco-agriculture.
- (vi) How are the ecopreneureships of on-farm and non-farm livelihoods developed in a bottom-up approach ?
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