

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

Term-End Examination

00387

December, 2014

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

Time : 3 hours

Maximum Marks : 100

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

1. Attempt any *ten* questions. Answer the following questions in about 100 words each. Each question carries 2 marks. $10 \times 2 = 20$
- (i) Define Infrastructure. Give suitable example.
 - (ii) Define Remote Sensing. Discuss its application in brief.
 - (iii) Define Sunk cost. Give suitable example.
 - (iv) What is People's Biodiversity Register ? Briefly explain.
 - (v) Define 'No rise in marginal cost' with suitable example.

- (vi) What is the difference between hard and soft infrastructure ? Explain with suitable examples.
- (vii) Define Gene-seed-grain banks. What are its advantages ?
- (viii) What is a Plunge mode of infrastructure development ? Give suitable example.
- (ix) What is Village Knowledge Centre ?
- (x) Define ecological footprint. How is it measured ?
- (xi) What is biological software ?
- (xii) Explain the concept of sustainable food security, with suitable example.
- (xiii) Define Greenhouse approach. What are its major focuses ?
- (xiv) Define health according to WHO. Who are medical care providers in India ?
- (xv) Define Organic agriculture. Give suitable example.

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

- (i) Explain the principles of sustainability based infrastructure development.
- (ii) What are the steps involved in establishing the bio-village ?

- (iii) Briefly explain the economic characteristics of infrastructure.
- (iv) What is the use of co-evolution approach in sustainable development ?
- (v) Explain the steps involved in the recovery of metals and plastics from the e-waste.
- (vi) What are the unifying principles of inducing sustainable rural development in the Himalayan region ?
- (vii) Explain the types of hard infrastructure.
- (viii) What is the difference between remote sensing and GIS ?
- (ix) Explain the following linkages :
 - (a) Lab-Lab
 - (b) Lab-Land
 - (c) Land-Lab
 - (d) Land-Land
- (x) What are the value-addition factors that increase agricultural production in India ?
- (xi) Explain mechanical biological treatment.
- (xii) Explain briefly about social capital.

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

- (i) What is recovery ? Explain the waste recovery procedures.
 - (ii) Explain the following :
 - (a) Three pillar model
 - (b) The capital stock model
 - (iii) Explain the strategies of Ecoagriculture.
 - (iv) What are the applications of remote sensing ?
 - (v) Explain the NEPED PROJECT in brief.
 - (vi) Explain the process of recycling and its importance.
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