

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

Term-End Examination

June, 2021

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

Time : 3 hours

Maximum Marks : 100

Note : Attempt any **ten** questions. Each question carries equal marks.

1. Define Infrastructure. Describe the general and economic characteristics of infrastructure in the context of sustainability. $2+4+4=10$

2. Explain any two sustainable infrastructure development approaches. $5+5=10$

3. Write short notes on any **two** of the following : $2\times 5=10$
 - (a) Challenges and Perspectives in the Indian Health Sector
 - (b) Sanitation for Sustainable Health
 - (c) SWOT Analysis of Food Processing Industry
 - (d) ZERI Methodology of Waste Management

4. What is Remote Sensing ? Describe the major components of remote sensing technology. 10
5. Describe any *two* of the following : 2×5=10
- (a) Peoples Biodiversity Register
 - (b) Three-tier Knowledge Network
 - (c) Important aspects of VRC and VKC
 - (d) Community gene, seed, grain banks and their importance
6. Describe various steps involved in setting up of a Bio-village. Explain how micro level planning is done for setting up of bio-villages. 5+5=10
7. Describe any four ecological foundations of evergreen revolution for sustainable food production. 10
8. Briefly describe the ecological foundations of sustainable agriculture in the context of the following : $2\frac{1}{2}\times 4=10$
- (a) Soil and soil health
 - (b) Biodiversity
 - (c) Fresh water
 - (d) Renewable energy

9. What is Food Security ? How do bio-villages and village knowledge centres play a key role in poverty alleviation and achieving food security ? $1+4\frac{1}{2}+4\frac{1}{2}=10$
10. What is a Model ? Explain any three models based on the concept of sustainable development. $1+3+3+3=10$
11. Define Integrated Farming System. Describe its role in improving the livelihood of small and marginal farmers, with suitable examples. $2+8=10$
12. Explain the value of cultural landscape in conservation of nature and natural resources in the context of shifting agriculture. 10
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