

EASTERN UNIVERSITY, SRI LANKA
FIRST YEAR SECOND SEMESTER EXAMINATION IN AGRICULTURE- 2012
EC: 1201 NATURAL RESOURCE ECONOMICS

Answer All questions

Time: 2 Hours



1. a. Define the term "Property rights"
b. Briefly describe the different characteristics of property rights.
2. a. What do you understand by the term "Resources"?
b. Explain the term "Flow Resources" using an example.
c. Discuss the sources of inefficiency in the current allocation system of water resources.
3. a. Graphically explain the biological dimension of a forest tree growth.
b. You are asked to determine the optimal harvest decision (rotation rule) for growing wood on a land. The harvesting cost is Rs. 4000 per acre. The land value after harvesting is Rs.50000 per acre. The market price of wood is predicted to stay constant at Rs.20 per cubic foot. The table below gives the estimated volume of the wood in the forest in various years.
 - i. Calculate the Annual incremental growth of a forest using the data provided.
 - ii. What is the rotation time that will give the maximum sustained wood yield?

Age (Years)	Volume (Cubic feet of wood/acre)
1	25
10	295
15	480
16	520
17	561
18	603
19	646
20	690
30	1189
31	1247
32	1306
33	1366
34	1427
35	1488
36	1548
37	1607
38	1663
39	1716
40	1766
41	1813
42	1857
43	1897
44	1934
45	1968
50	2094

4. Write Short Notes on the following.
- Economics of forest harvesting
 - Negative production externality
 - Public goods
 - Open- access resources