

- 21 Discuss graphical and simplex method in LPP.
- 22 Explain EMV, EOL, EUPI.
- 23 Explain the basic theme in game theory.
- 24 What is duality ?
- 25 Discuss the methods for solving assignment problem.
- 26 Distinguish between project control and updating.
- 27 Explain the rules for constructing a network diagram.
- 28 Solve the game whose pay-off matrix is given below.

	<i>Player B</i>	
	B1	B2
A1	-6	7
A2	4	-5
A3	1	-2
A4	2	5
A5	7	-6

(10 x 2 = 20 weightage)

Part C (Essay questions)

Answer any three, not exceeding three pages each.

- 29 Analyse the saddle point theorem and show how game problem is solved?
- 30 Discuss the significance of resource allocation and scheduling in economic analysis.
- 31 Discuss the limitations of Mathematical approach to economic and social problems.
- 32 Solve the following LPP graphically.

$$\text{Minimize } Z = 3X_1 + 5X_2$$

$$\text{subject to } X_1 + X_2 \leq 10$$

$$3X_1 + 4X_2 \leq 34$$

$$+ 5X_2 \leq 15$$

$$X_1, X_2 \geq 0.$$

Turn over

- 33 For the following project work, draw network diagram, find EST, EFT, LST, LFT total float critical path and duration.

<i>Activity</i>	<i>Duration</i>
1-2	1
2-3	5
2-4	3
3-5	4
4-5	2
4-6	5
4-7	9
5-7	4
6-7	2
7-8	2

(3 x 4 = 12 weightage)

C 44234

(Pages 3)

Name.....

Reg. No.....

SECOND SEMESTER M.A. DEGREE EXAMINATION, AUGUST 2013

(CUCSS)

Applied Economics

ENVIRONMENTAL ECONOMICS

Time : Three Hours

Maximum : 36 Weightage

Part A

*Answer **all** questions.*

*Each bunch of **four** questions carries a weightage of 1.*

1. The Stockholm conference on Human Environment took place in :
(a) 1987. (b) 1972.
(c) 1992. (d) None of these.
2. The national occurrence of resources in the earth crust represents :
(a) Resource endowment. (b) Potential resources.
(c) Inherent resources. (d) None of these.
3. The most popular method of resource conservation practiced by the Industrial Unit is :
(a) Recycling. (b) Renewing.
(c) Less resource extraction. (d) Revising.
4. Which of the following is a biodegradable waste ?
(a) Vegetable and Fruit peels. (b) Silver foil.
(c) Detergent. (d) Rubber.

Multiple Choice :

5. Most natural resources and environment amenities are :
(a) Public goods. (b) Private goods.
(c) Government goods. (d) Free goods.
6. The articles tragedy of commons was written by :
(a) Pareto. (b) Marshall.
(c) Keynes. (d) None of these.
7. When an activities of one agent causes loss of Welfare to another agent it is ?
(a) Positive externality. (b) Negative externality.
(c) Optional externality. (d) None of these.

Turn over

8. Abatement cost refers to :

- | | |
|------------------------------|-----------------------------|
| (a) Pollution control costs. | (h) Pollution damage costs. |
| (c) Total costs. | (d) Social costs. |

Fill in the blanks :

9. The basic rule for optimally using a non-renewable resource is _____
10. Acid rain is caused by _____
11. The region where life exists on the earth is called _____
12. The Index of sustainable economic welfare was developed by _____

True or False :

13. Solar energy is non-renewable.
14. Travel cost method is used to estimate position externality.
15. Green accounting is a component of social accounting.
16. Live stock is a Natural renewable resource.

(16 x $\frac{1}{4}$ = 4 weightage)

Part B (Short Answer Questions)

*Answer any **ten** not exceeding **one page** each.*

17. What do you mean by environmental ethics ?
18. What is Externality ?
19. What is Sustainable development ?
20. What do you mean by conservation of resources ?
21. Explain the role of discount in environmental valuation.
22. What is Pollution Tax ?
23. Explain Pareto Optimality.
24. What are Hazardous wastes ?
25. Distinguish between renewable and non-renewable resource.
26. Explain why all environmental problems are best viewed as economic problem.
27. Environmental quality as a public good. Discuss.
28. Explain the characteristics of Public Goods.

(10 x 2 = 20 weightage)