

# Unit 8 - Week 6 - Preferences, Utility and Social choices

## Course outline

How does an NPTEL online course work?

Practice Assignment

Week 1 - Introduction

Week 2 - Energy and quality of life, Country energy balance

Week 3 - Energy Economics

Week 4 - Energy Resources

Week 5 - Non-Renewable Resource Economics

**Week 6 - Preferences, Utility and Social choices**

● Lecture 10: Preferences and Utility

● Lecture 11A: Utility and Social Choice - Part 1

○ Lecture 11B: Utility and Social Choice - Part 2

○ Lecture 11C: Utility and Social Choice - Part 3

○ Lecture 11D: Utility and Social Choice - Part 4

● Lecture 12: Revision Paper-1 (Part 1)

● Additional Learnings

○ Quiz : Assignment 6

○ Assignment 6 Solutions

○ Download Videos

○ Weekly Feedback

Week 7 - Public and private goods, Externalities

Week 8 - Energy and Financing

Week 9 - Input-Output Analysis

Week 10 - Primary Energy Analysis, Net Energy Analysis

Week 11 - Net Energy Analysis (Continued), Energy Policy

Week 12 - Energy policy (continued), Future Energy Systems

Text Transcripts

## Assignment 6

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

**Due on 2020-03-11, 23:59 IST.**

1) Which amongst the following is not a property of preferences? 1 point

- Completeness  
 Monotonicity  
 Transitivity  
 Additivity

No, the answer is incorrect. Score: 0

Accepted Answers: Additivity

2) Which of the following statement(s) is/are correct? 1 point

- All the points on an indifference curve have same utility  
 Indifference curves intersect with each other  
 Indifference curves can have upward or downward slope  
 Indifference curves cannot be thick

No, the answer is incorrect. Score: 0

Accepted Answers: All the points on an indifference curve have same utility  
Indifference curves cannot be thick

3) Biocentrism perspective implies that, 1 point

- Human being should be the central point of all economic activities  
 Every living organism on Earth has value and should be preserved  
 Only those living organisms with instrumental values should be preserved  
 Health of ecosystem is of utmost importance

No, the answer is incorrect. Score: 0

Accepted Answers: Every living organism on Earth has value and should be preserved

4) Two indifference curves can intersect, but only at right angle. 1 point

- False  
 True

No, the answer is incorrect. Score: 0

Accepted Answers: False

5) Consider a plot of all possible combination of goods for 2-person society, where X axis denotes utility of person x and Y axis denotes utility of person y. 1 point

There are four points on the plot.

Point A: (1,1)

point B: (2,2)

point C:(0.5,2)

point D: (2,1)

Which of the following statement(s) is/are true?

- Point A is Pareto preferred over point B  
 Point B is Pareto preferred over point A  
 Moving from point A to C can be a potential Pareto improvement  
 Moving from point D to C can be a potential Pareto improvement

No, the answer is incorrect. Score: 0

Accepted Answers: Point B is Pareto preferred over point A  
Moving from point A to C can be a potential Pareto improvement

6) Supply curve for a commodity in the market is given as  $P=1000+1.5Q$  and demand curves is given as  $2000-0.5Q$ , where P is price of commodity and Q is quantity of commodity.

Find the quantity of commodity at market equilibrium point.

**Hint**

No, the answer is incorrect. Score: 0

Accepted Answers: (Type: Numeric) 500

1 point

7) Supply curve for a commodity in the market is given as  $P=1000+1.5Q$  and demand curves is given as  $2000-0.5Q$ , where P is price of commodity and Q is quantity of commodity. 1 point

What are values of consumer's surplus and producer's surplus respectively?

- 15,000 units, 150000 units  
 187,500 units, 62,500 units  
 625,000 units, 187,500 units  
 62,500 units, 187,500 units

No, the answer is incorrect. Score: 0

Accepted Answers: 62,500 units, 187,500 units

8) Consider a utility function  $U(x_1, x_2) = (x_1)^1 + 6.5 * x_1 * x_2 + 2 * (x_2)^2$

What is marginal rate of substitution at point P (2,1), if P lies on  $U(x_1, x_2)$  ?

**Hint**

No, the answer is incorrect. Score: 0

Accepted Answers: (Type: Range) 0.58,0.66

0 points

9) Consider an indifference curve given by the expression,  $x_2 = 5 - x_1$  1 point

Marginal Rate of substitution:

- is constant  
 increases with increase in  $x_1$   
 Increases with decrease in  $x_1$   
 is equal to zero

No, the answer is incorrect. Score: 0

Accepted Answers: is constant

10) According to Lawrence Summers' memo, 1 point

- Underpopulated countries are underpolluted  
 Health impairing pollution should be done in countries where wages are high  
 Dirty industries should be migrated to less developed countries

No, the answer is incorrect. Score: 0

Accepted Answers: Underpopulated countries are underpolluted  
Dirty industries should be migrated to less developed countries