



IEOx: WINTERCHALLENGE 2024 ECONOMICS QUIZ

Instructions and definitions

Welcome to the Economics round of the IEOx WinterChallenge!

You have to answer 20 multiple choice questions in 80 minutes.

By clicking on the button in the top right corner of your screen, you can open a timer to see how much time you have left.

Keep in mind that you will get negative points for wrong answers, so if you are not sure you know the right answer, choose:

"I will not answer this question".

Suppose that comma (",") indicates a decimal point.

Click on images and zoom in, using "+" where needed.

Do not forget to submit your answers and fill in your full name and the PERSONAL code we sent you in the last e-mail (as "student's ID"), properly. It is crucial to identify your results!

Wishing you success! We hope you enjoy the experience! :)

QUESTION 1 ☆

Demand

Harvey Leibenstein divided consumer demand into functional and non-functional demand.

Which kind of demand does the example below illustrate?

"After Alan's friends spoke enthusiastically about comfortable brand-name sneakers, Alan also decided to purchase them."

- The Snob effect
- The Bandwagon effect
- Speculative demand
- The Veblen effect
- I will not answer this question

QUESTION 2 ☆

Claude eats fruit every afternoon. He usually chooses an apple or a banana. Whenever he opts to eat an apple, he also eats a cinnamon biscuit.

The cross elasticity of demand is between apples and cinnamon biscuits and between apples and bananas.

- Positive , Positive
- Negative , Negative
- Positive , Negative
- Negative , Positive
- I will not answer this question

QUESTION 3 ☆

Specialization

Small island states are considered to benefit from free trade. It is reasonable to consider that they usually take advantage of:

- capital-intensive exports
- labour-intensive exports
- organizational factors
- increasing returns to scale
- I will not answer this question

QUESTION 4 ☆

The Phillips curve can be used to describe:

- the effect of an interest rate increase on the demand for money
- how decreasing interest rates may increase private investment
- the reason why QE (Quantitative Easing) reduces unemployment in the short run
- the appearance of stagflation
- I will not answer this question

QUESTION 5 ☆

John and Penelope have been in a relationship for 3 years now.

Although in the beginning everything seemed great now they have lost their initial spark and for both of them the situation feels like a dead end.

John is thinking about divorcing Penelope, but he believes this is not preferable since he has invested so much into this relationship.

His thinking is an example of:

- incomplete information
- survivorship bias
- the fallacy of composition
- sunk cost fallacy
- I will not answer this question

QUESTION 6 ☆

Social Interactions

WiCstone is only extracted by two quarries owned by WinterStone Ltd and ChallengeStone Ltd.

Below you can see the pay-off matrix for the two firms.

The options they have are to **increase** output, keep it **stable** or **decrease** the output. The pay-offs are accounted in millions of dollars of profit (or loss if negative).

		ChallengeStone		
		Increase	Stable	Decrease
WinterStone	Increase	-5, -5	10, -10	15, -15
	Stable	-10, 10	0, 0	2, -1
	Decrease	-15, 15	-1, 2	4, 4

- Both firms will **increase** output
- Both firms keep output **stable**
- Both firms will **decrease** output
- There is **not one** equilibrium in this case
- I will not answer this question

QUESTION 7 ☆

The appropriate **fiscal** policy to boost an economy is:

- increasing money supply
- reducing interest rate
- reducing tax rate
- all of the above
- I will not answer this question

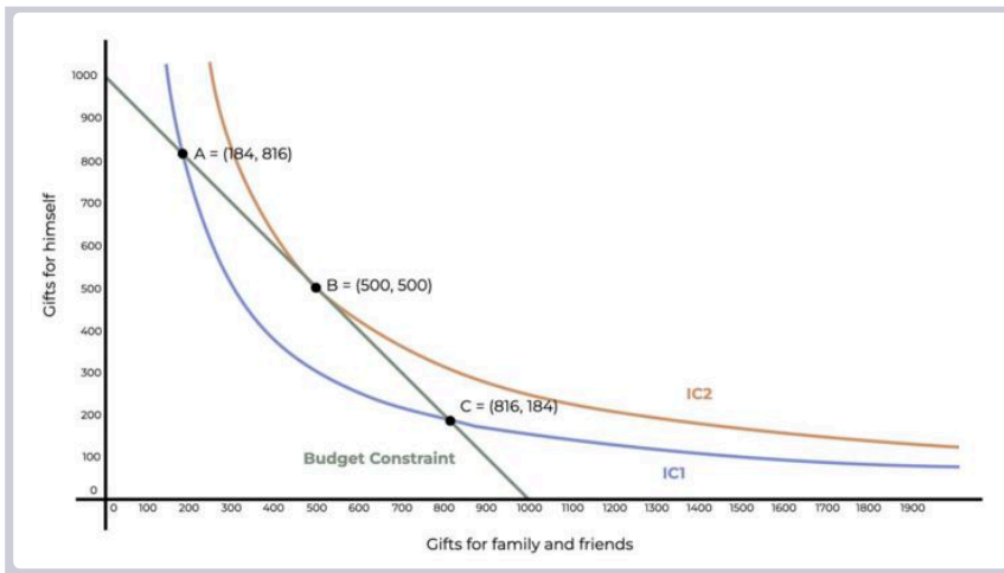
QUESTION 8 ☆

Scarcity, Work and Choice

Jorge has a sum of 1000€.

New Year's Eve is approaching, so he is thinking of distributing that amount between buying gifts for himself and for his friends and family. Below you can see his budget constraint (the green line) and two of his indifference curves (IC1 and IC2).

Given the diagram, which distribution of his income should he choose?



- A
- B
- C
- Any of the above, he is indifferent between A, B and C
- I will not answer this question

QUESTION 9 ☆

Inflation, Unemployment and Monetary Policy

A 100\$ deposit at the beginning of year 1 will be a(n) \$ deposit at the end of year 2:

	Year 1	Year 2
Inflation rate, %	3	8
Nominal interest rate, %	8	3

- \$100
- about \$111
- \$99,75
- \$105
- I will not answer this question

QUESTION 10 ☆

The firm and its customers

Your friend finally became rich and their income increased from \$10.000 to \$130.000. This led them to move from a $50 m^2$ house to a $200 m^2$ house in the same neighborhood. The coefficient of income elasticity of demand will be equal to:

- 3
- 3
- 0,25
- 1,25
- I will not answer this question

QUESTION 11 ☆

Supply and Demand : Price Taking and Competitive Firms

A WiCopolist operates under conditions of monopoly.

Demand is described by the function $Q_D = 480 - 4 \cdot P$, and the firm's total costs correspond to the function $TC(Q) = 40 \cdot Q$. What will the market price be?

- \$80
- \$160
- \$60
- \$180
- I will not answer this question

QUESTION 12 ☆

Martians direct their disposable income at consumption and savings.

An increase of private investment spending on Mars by 80 Martian units led to an increase in Martian national income by 400 Martian units. In this case, it can be argued that the marginal propensity to save (MPS) is equal to:

- 4,3
- 0,7
- 0,9
- 0,2
- I will not answer this question

QUESTION 13 ☆

Social Interactions

Imagine that there is an economy consisting of a single factory owned by a wealthy man who earns 10 million monetary units a month and 100 workers who earn 50.000 monetary units a month. Which of the following 4 options describes a Pareto improvement?

- The workers double their wages to 100.000 monetary units a month but the owner now earns 9 millions a month.
- The owner increases his earnings to 15 million monetary units a month and workers receive only half their initial wage (25.000) monetary units.
- The owner earns 20 million a month and the workers receive the same wage.
- The workers overthrow the capitalist and now everyone earns 150.000 per month.
- I will not answer this question

QUESTION 14 ☆

Which of the following 4 statements is **NOT** a requirement for a group of countries to constitute an Optimum Currency Area (a single currency would be appropriate)?

- There should be labor mobility between the countries
- They should experience business cycles in similar periods
- They should have capital mobility as well as flexible wages and prices
- They should produce similar goods and services
- I will not answer this question

QUESTION 15 ☆

Economic Fluctuations and Unemployment

The following matrix refers to a country in which:

Population	10.000.000
Children	900.000
Elderly people	1.000.000
People with disabilities	250.000
Stay-at-home parents	650.000
Idle	200.000
Unemployed	1.500.000

- unemployment rate has been stabilized to its natural level
- unemployment rate is higher than 20%
- unemployment rate is 15%
- everyone who is physically capable to work is member of the labor force
- I will not answer this question

Unemployment and Fiscal Policy

Hidden in the depths of jungle there is a country named Wakanda. The official currency is the Wakandan Dollar and 40 million such dollars are currently in circulation. The matrix includes macroeconomic data for 2023.

The prince has appointed you as economic advisor and wants you to find out what the velocity of money in the country is.

Government Spending	40.000.000 wakandan dollars
Investment	45.000.000 wakandan dollars
Consumption	25.000.000 wakandan dollars
Exports	20.000.000 wakandan dollars
Imports	10.000.000 wakandan dollars

- 3
- 3,5
- 2,5
- Cannot define
- I will not answer this question

Suppose that Firm A is producing and offering on the market Q_1 units of a good.

Its only variable factor of production is labor.

At such a level of production, the marginal product of labor is equal to 0.

If the price of the good increases by 50% the elasticity of supply will be:

- 1
- 0,5
- 0
- impossible to calculate based on the given information
- I will not answer this question

QUESTION 18 ☆

"The skeleton is a complex organ system which can be quantified along many dimensions. The most commonly measured is height, and its determinants have been extensively studied.

While adult height is the product of both genetic and environmental factors, the critical period when height attainment is most sensitive to environmental influences appears to be early in life."

Which of the following can be deduced?

- In societies with a high gini coefficient, we expect to have a large distribution of people's height in height classes.
- The consumption of Giffen goods in societies when it comes to alimentation could possibly result in a lower height class distribution than the one determined by genes.
- The countries with the highest GDP tend to have taller people.
- Skeletal height can be definitely used as an indicator of economic prosperity.
- I will not answer this question

QUESTION 19 ☆

"Coase's analysis suggests that a lack of established property rights, and other impediments leading to high transaction costs, may stand in the way of using bargaining to resolve externalities."

In this case, transaction costs could be considered as:

- additional externalities
- establishment expenses
- being negligible
- opportunity costs
- I will not answer this question

QUESTION 20 ☆

The willingness of individuals to pay more for an item when the proceeds go to charity is considered as:

- irrational decision making
- rent seeking
- altruism
- bounded rationality
- I will not answer this question

