Before you start, read the following carefully:

- The test has a maximum duration of one hour and fifteen minutes.
- The test has two parts: Part A consists of 20 multiple-choice questions, and Part B, of open-answer questions.
- Write your answers to Part A in the table below in this page. At the end of the exam separate this sheet from the rest of the exam and hand it in together with your answers to Part B. Make sure you have written your identification in this page below.
- This is a closed-book test: you cannot look up any book or any other learning material.
- You may use non-graphing calculators but you cannot use graphing calculators**.**
- Keep mobile phones, tablets and pcs switched off**.**

Full name:		
Student number:	**Class:**	**Degree:**

Part A (15 marks)

Indicate the correct answer to the questions 1 to 20, with an 'O' in the table below. You get 0.75 marks for each correct answer and will have a 0.2 deduction for each wrong answer.

At the end of your exam, separate this sheet from the rest of the exam paper and hand it in together with your answers to Parts B.

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)	a)
b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)	b)
c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)	c)
d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)	d)

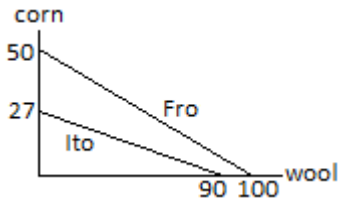
1. **When producing goods *X* and *Y*, the opportunity cost of *Y* in terms of *X* is:**
   a) The resources we have to shift from production of *X* to production of *Y* to produce one more unit of *Y*.
   b) The amount of good *Y* we have to forgo to produce one more unit of *X*.
   c) The amount of good *X* we have to forgo to produce one more unit of *Y*.
   d) The resources we have to shift from production of *Y* to production of *X* to produce one more unit of *Y*.

2. **Given the hours required to produce beer and wine:**

	in Country *A*	in Country *B*
1 litre of beer	4	2
1 litre of wine	9	3

   a) Country B has comparative advantage in producing wine.
   b) Country *A* has comparative advantage in producing wine.
   c) Country *A* has absolute advantage in producing both goods.
   d) Country *B* has comparative advantage in producing wine.

3. **The figure shows the Production Possibility Frontiers of countries Fro and Ito, which have the same amount of resources. Then:**



   a) Fro has comparative advantage in the production of wool.
   b) Ito has absolute advantage in the production of both goods.
   c) Fro has comparative advantage in the production of corn.
   d) Ito has comparative advantage in the production of corn.

4. **Which of the following events causes an increase in market demand for *Bell* beer (a normal good)?**
   a) A decrease in students' monthly allowances.
   b) An increase in the price of *Grail* beer.
   c) An increase in the price of peanuts.
   d) None of the other answers is correct.

5. **The demand function for 'pocket books' is Q^D=78-P and the supply function is Q^S=P-2. Now the government sets the price at P=20€. Then:**
   a) There is excess supply equal to 40 books and 18 books are sold in the market.
   b) There is a market equilibrium at price equal to €40 and quantity equal to 40 books.
   c) There is excess demand equal to 40 books and 18 books are sold in the market.
   d) None of the other answers is correct.

6. **The price of cheese rises because of a drought. Cheese and jam are substitute goods. What will happen to equilibrium in the jam market?**
   a) Price will fall, quantity will rise.
   b) Price and quantity will rise.
   c) Price will rise, quantity will fall.
   d) Price and quantity will fall.

7. **Which of the following statements is <u>true</u>?**
   a) Consumer surplus is the difference between the minimum amount a consumer is willing to pay and what he or she actually pays.
   b) Producer surplus is the difference between the amount of money a seller is paid and the maximum amount that he or she needs to be paid.
   c) Market surplus is equal to the sum of consumer surplus and producer surplus.
   d) All the other answers are true.

8. **At ISEG café the equilibrium price of an espresso coffee is €0.35. Suppose the Administration sets a price floor of €0.30. Then the consumer surplus will:**
   a) Increase.
   b) Fall.
   c) Remain unchanged.
   d) The information is not enough to answer.

9. **In a certain market, potential consumers will buy at most one unit. The market is in equilibrium. Paula's consumer surplus is €15, and Ruth's is €5. Then:**
   a) Not knowing the equilibrium price, it is impossible to tell whether Paula and/or Ruth are buying the good.
   b) If the price rises by €10, Paula will continue to buy the good, but Ruth will not.
   c) If the price rises by €10, Ruth will continue to buy the good, but Paula will not.
   d) No knowing Paula's and Ruth's willingnesses to pay, we cannot tell whether they are buying the good.

10. **In a market there are five potential consumers, who will buy at most one unit and have willingness to pay (*WTP*) as shown below. How much is the total consumer surplus when the price is €100?**

Consumer	*WTP* (€)
A	150
B	125
C	105
D	60
E	25

   a) €380.
   b) €80.
   c) Zero, as no one will buy the good.
   d) €115.

11. A market is in equilibrium. Then a price ceiling below the equilibrium price will:

a) Make all consumers better off.
b) Make some consumers better off, some worse off.
c) Make all producers better off.
d) Make some producers better off, some worse off.

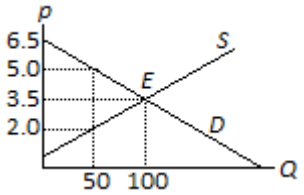
12. Which of the following may lead to inefficiently high quality?

a) Quotas.
b) Price ceilings.
c) Price floors.
d) None of the other answers is correct.

13. The quota rent is:

a) The maximum quantity the government allows the market to trade.
b) The combined loss of consumer and producer surplus arising from a quota.
c) The combined loss of consumer and producer surplus arising from a price floor or price ceiling.
d) None of the other answers is correct.

14. The market shown below is in equilibrium at *E.* If the government sets a quota limit at 50 units the deadweight loss will be:



a) €15.
b) €30.
c) €75.
d) The information is not enough to answer.

15. If clothing is a normal good, then which of the following could be the value of income elasticity of demand?

a) 0.2.
b) 0.8
c) 1.4.
d) All other answers are correct.

16. Price-elasticity of demand is less than 1 in absolute value over a certain range of the demand curve. If prices falls within this range then:

a) Consumers' total expenditure will rise.
b) Consumers' total expenditure will fall.
c) Consumers' surplus will fall.
d) Producers' surplus will rise.

17. A producer facing a linear negatively-sloped demand curve will maximise revenue by setting a price where demand is:

a) Elastic.
b) Inelastic.
c) Unit-elastic.
d) None of the other answers is correct.

18. The Price-cross-elasticity between two substitute goods is:

a) Always positive.
b) Always zero.
c) Always negative.
d) Either positive or negative.

19. In a market the equilibrium price is now €20. The government then levies a €5 tax per unit, and the consumer price increases to €24. The tax borne by the seller is:

a) €4.
b) €15.
c) €1.
d) €0.

20. Producers will bear the entire tax burden of an excise tax if:

a) Demand is unit elastic.
b) The demand curve is vertical.
c) Producers are the ones required by law to pay the tax.
d) The supply curve is vertical.

Part B (5 marks)

In some market the demand and supply curves are $D = 60 - 30p$ and $S = 2p$.

a) Find the equilibrium quantity and price, consumer surplus and producer surplus. Illustrate in a graph. [1.5 marks]

b) Owing to rising consumers' income, quantity demanded increases by 15 units at any price. Find the new equilibrium price and quantity. Illustrate the new situation in a graph. [1.5 marks]

c) Find the changes in consumer surplus and in producer surplus arising from the change described in part b). [2 marks]

Answers

Part A

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
c	a/b/d	c	b	c	b	c	c	b	b	b	c	d	c	d	b	c	a	c	d

Part B

a) In equilibrium, $S = D \Leftrightarrow 2p = 60 - 30p \Leftrightarrow p = 1.875$; $Q = S(1.875) = 2 \times 1.875 = 3.75$, as illustrated in the figure.

b) The new demand curve is $D' = D + 15 = 75 - 30p$. Now in equilibrium, $S = D \Leftrightarrow 2p = 75 - 30p \Leftrightarrow p = 2.34375$; $Q = S(2.34375) = 2 \times 2.34375 = 4.6875$, as illustrated in the figure.

c) As can be seen from the figure, the consumer surplus initially is: $CS = (2 - 1.875) \times 3.75/2 = 0.234$. After demand has increased it is $CS = (2.5 - 2.344) \times 4.688/2 = 0.366$. So it increases by 0.132.

Producer surplus increases by $(2.344 - 1.875) \times (3.75 + 4.688)/2 = 1.978$.