



TENTAMEN / EXAMINATION



12307683

Fylls i av **student** / To be completed by the **student**

Skriv anonymiseringskoden på samtliga svarsblad / Write your anonymity code on each sheet		Anonymiseringskod / Anonymity code	
		N E G A 1 0 - 0 0 0 1 - K M C	
Provbenämning / Exam name			Oanmäld
Skriftlig tentamen mikroekonomi			
Kurskod / Course code	Modul / Module	Tentamensdatum / Examination date	
N E G A 1 0	1 0 0 0	2 0 2 2 - 0 3 - 1 0	
Jag har tagit del av regler som gäller vid tentamen / I have read the current rules for examinations		Antal inlämnade blad med anonymiseringskod / Number of sheets with anonymity code	
<input checked="" type="checkbox"/> Ja / Yes		1 2 ✓	

Fylls i av **skrivvakt** / To be completed by the **invigilator**

Kontroll av legitimation / Identification checked	<input checked="" type="checkbox"/> Ja / Yes	Härmed intygas att kontroller utförts / This is to certify that the checks have been carried out
Kontroll av inlämnade blad / Answer sheets checked	<input checked="" type="checkbox"/> Ja / Yes	
Inlämningstid / Time of submission	1 1 : 0 8	Tydlig sign. / Signature MBF

Fylls i av **lärare** / To be completed by the **examiner**

Bedömning av uppgifter / Questions attempted											MC
1	2	3	4	5	6	7	8	9	10	~	
6,5	7	3,5	5					8,5			
11	12	13	14	15	16	17	18	19	20	~	
21	22	23	24	25	26	27	28	29	30	~	
Totalt antal poäng / Total points					Examin. lärare / Kursansvarig signatur / Signature of the examiner						
30,5											
Betyg / Grade					Namnförtydligande / Clarification of the signature						
VG											

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Försättsbladet ska alltid lämnas in även om ingen uppgift behandlats /
Examination should always be submitted even if no questions are answered

DEL 1

①

Anonymitetskod... NEGA 10-0001-KMC

FLERVALSFRÅGOR

(OBS! Endast 1 svar på varje fråga)

FRÅGA	RINGA IN RÄTT SVAR			
1	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
2	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
3	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
4	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
5	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
6	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
7	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
8	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
9	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
10	<input checked="" type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
11	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
12	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
13	<input type="radio"/> A	<input type="radio"/> B	<input checked="" type="radio"/> C	<input type="radio"/> D
14	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
15	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
16	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
17	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
18	<input type="radio"/> A	<input checked="" type="radio"/> B	<input type="radio"/> C	<input type="radio"/> D
19	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D
20	<input type="radio"/> A	<input type="radio"/> B	<input type="radio"/> C	<input checked="" type="radio"/> D

3 del
8,5 p.

Fel svar ger ej poängavdrag.

No points will be deducted for the wrong answer

Skriv ej i detta område
Leave this area blank

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NEGA 10-0001-KMC

Löpande sidnr
Consecutive no:

2 DEL 2

Uppgift nr /
Question no: 1

Poäng / Points
awarded:

6,5

Lärarens
anteckning
Examiner's remarks:

$$P_A = 100 - Q_A$$

$$MC = 20 \text{ euro}$$

$$P_B = 50 - 0,5 Q_B$$

$$FC = 1000 \text{ euro}$$

a) V_{\max} när

$$MR = MC$$

MONOPOL

GRUPPA:

$$MR = 100 - 2 \cdot Q$$

$$MC = 20$$

$$MR = MC \Rightarrow 100 - 2Q = 20$$

$$80 = 2Q \quad | :2$$

$$\underline{Q_A = 40}$$

R

$$P = 100 - Q_A = 100 - 40 = \underline{P_A = 60}$$

SVAR:

Vinstmaximerande pris för kundgrupp A är 60 euro och v. kvantitet 40.

GRUPP B:

 V_{\max} när

$$MR = MC$$

MONOPOL

$$MR = 50 - 2 \cdot 0,5 Q$$

$$MC = 20$$

$$50 - 1 \cdot Q = 20$$

$$\underline{30 = Q_B}$$

$$P = 50 - 0,5 \cdot Q_B = 50 - 0,5 \cdot 30 = 50 - 15 =$$

$$\underline{P_B = 35}$$

11

Svar:

Vinstmaximerande pris för kundgrupp B är 35 euro och v. kvantitet 30. R

Skriv ej i detta område
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Consecutive no:

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Uppgift nr /
Question no:

1

Poäng / Points
awarded:

Lärarens
anteckning
Examiner's remarks:

$$b) V = TR - TC \quad TR = (P_A \cdot Q_A) + (P_B \cdot Q_B)$$

$$TC = FC + VC$$

$$TR = (60 \cdot 40) + (35 \cdot 30) = 2400 + 1050 = 3450$$

$$FC = 1000 \quad VC = 20(MC) \cdot Q \quad VC = 20Q$$

$$TC = 1000 + (20 \cdot 70) = 1000 + 1400 = 2400$$

$$Q_A + Q_B = 70$$

$$V = 3450 - 2400 = \underline{1050} \quad R$$

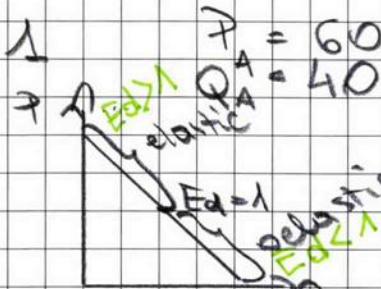
1,5

Svar: Företagets vinst är 1050 euro.

c) GRUPPA:

$$E_d = \frac{\Delta Q}{\Delta P} \cdot \frac{P}{Q} \quad \frac{\Delta Q}{\Delta P} = 1 / \text{slope}$$

$$P_A = 100 - 1Q \quad \frac{\Delta Q}{\Delta P} = 1/1 = 1$$



$$E_d = 1 \cdot \frac{60}{40} = \underline{1,5} \quad R$$

Svar: Pris elasticitet för gruppen A är 1,5 så det är elastic. Pris känslighet

GRUPP B:

$$E_d = \frac{\Delta Q}{\Delta P} \cdot \frac{P}{Q} \quad \frac{\Delta Q}{\Delta P} = 1 / \text{slope}$$

$$P_B = 35$$

$$Q_B = 30$$

$$P_B = 50 - 0,5Q \quad \frac{\Delta Q}{\Delta P} = 1/0,5 = 2$$

2

$$E_d = 2 \cdot \frac{35}{30} = \frac{70}{30} \approx \underline{2,33} \quad R$$

Svar: Pris elasticitet för grupp B är ca 2,33 så det är mer elastic än i grupp A.

Mer pris känslighet



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 Consecutive no:

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Uppgift nr /
 Question no:

1

Poäng / Points
 awarded:

Lärarens
 anteckning
 Examiner's remarks:

d) Först att kunna tillämpas prisdiskriminering 3 vilkor måste träffas:

- Power Market ?
- Different consumers groups
- resale is not possible.

Det finns tre grader av prisdiskriminering:

1^o - when each consumer has the maximum price he/she is willing to pay ex: airlines

2^o - when price depend of amount of purchase: ex: buy two get one more free.

3^o - when different age group has different prices: ex: movie tickets for cinema for students has lower price.

115

Häftområde

Skriv ej i detta område
 Leave this area blank



$$P_s = 200 + 2Q \quad P_D = 2000 - 2Q \quad P = p/t$$

$$Q = t \cdot$$

a) $MR = MC$

$$2000 - 2Q = 200 + 2Q$$

$$1800 = 4Q \quad | :4$$

$$\boxed{Q = 450 \text{ t. ton}}$$

$$P = 2000 - 2 \cdot 450 = 2000 - 900 = \boxed{1100 \text{ per t.}}$$

Svar:

Jämviktspris är 1100 per ton
och jämviktskvantitet är 450 tusental ton.

b) $MC_0 = 100$

$$SMC = MC + MC_0$$

$$SMC = (200 + 2Q) + 100$$

$$SMC = 300 + 2Q$$

Svar:

Ekvivalent för de totala samhällens
marginalkostnaderna är: $\boxed{SMC = 300 + 2Q}$

c) $SMC = MR$

$$300 + 2Q = 2000 - 2Q$$

$$4Q = 1700 \quad | :4$$

$$\boxed{Q = 425 \text{ t. ton}}$$

$$P = 2000 - 2 \cdot 425 = 2000 - 850 = \boxed{1150 \text{ per t.}}$$

Svar:

Den samhällsoptimala produktionen
är med $Q = 425 \text{ tus. ton}$ och

$$\boxed{P = 1150 \text{ per ton.}}$$

Vilket pris
-delat
14
1150



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Löpande sidnr
 Consecutive no:

6

Uppgift nr /
 Question no:

2

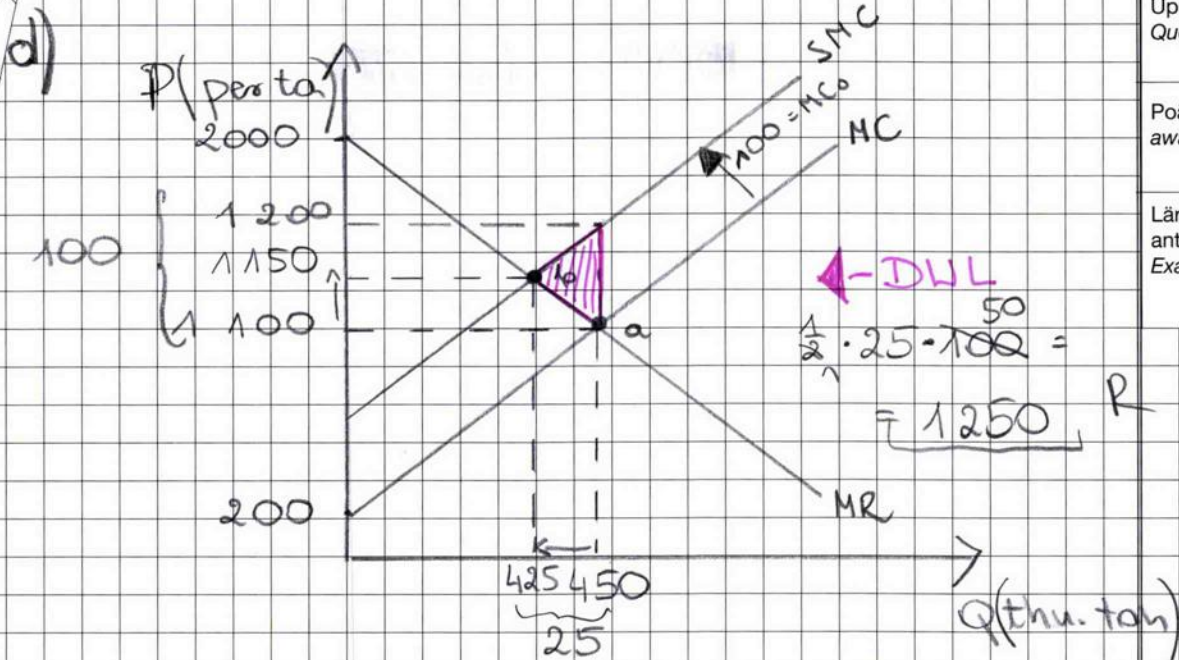
Poäng / Points
 awarded:

Lärarens
 anteckning
 Examiner's remarks:

2

Häftområde

Skriv ej i detta område
 Leave this area blank



a - jämvikt

b - samhällsoptimal nivå

$$300 + 2Q = 300 + 2 \cdot 450 = 300 + 900 = 1200$$

eller

$$1100 + 100 = 1200$$

Svar:

The DWL caused by externality is equal = 12500.

Svar:

c) skatten ska vara samma som MC_0 så 100 per ton

negative externalities is when the third party "is paying" for overproduction of the company. That cause inefficiency in the market (DWL).

That is why government making the tax which is exactly high like the externality - to reduce DWL.

Skriv ej i detta område
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Löpande sidnr
Consecutive no:

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Uppgift nr /
Question no:

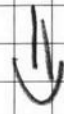
2

Poäng / Points
awarded:

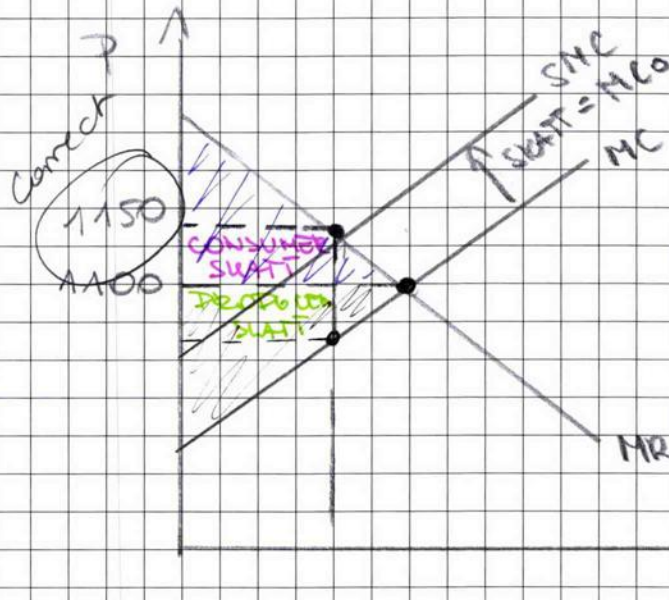
Lärarens
anteckning
Examiner's remarks:

1,5

there will be new equilibrium
with the social optimum and
company can produce when
 $MR = MSC$. The answer and
diagram below will explain
more why is so efficient
no DWL then



f)



0,5

Var
Ny pris efter skatt blir 1100 per ton tax
this was the price before the tax



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Löpande sidnr
 Consecutive no:

8

Uppgift nr /
 Question no: 3

Poäng / Points
 awarded:
 3,5

Lärarens
 anteckning
 Examiner's remarks:

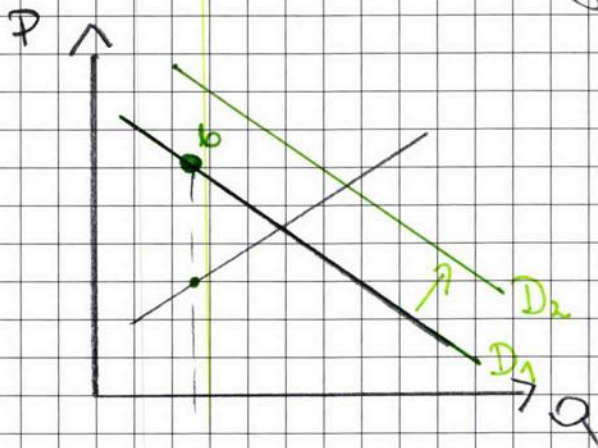
Häftområde

Skriv ej i detta område
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a) Förändring av efterfrågan
 ⇒ the curve shifts (vänster eller höger)

förändring i den efterfrågade
 kvantitet.

⇒ the movement along the curve



i: teknologiska framsteg, priset faller
 Svar: the demand curve shift to the right. (D₁ ⇒ D₂) F

ii: vid en kraftig lågkonjunktur ● = b
 Svar: the movement along the D₁ curve. ⊙
 The change in quantity (less) and the price (higher) F



b) Price elasticity can depend of what type of goods we are talking about. If the good has a R_2 subsidy? If more? possible subsidies then higher price elasticity. No subsidy = lower or lack of p.el.)
 Good perfectly inelastic (we found by them even if they costs "millions") are essential goods. like medicine (insuline). } don't understand.

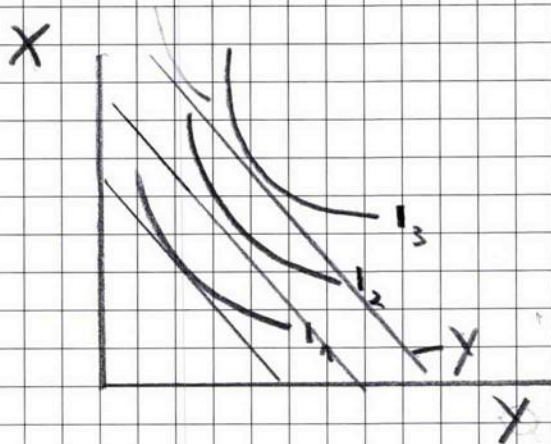
The result E_D is the relationship between percentage change in quantity and percentage change in price.

$$E_D = \frac{\% \Delta Q}{\% \Delta P}$$

låg elasticitet - petrol (in the short run) - we need them to ride a car, but in the long run \rightarrow we will try to ex. buy a electricity car
 hög elasticitet - pizza \rightarrow if pizza will cost a lot we will eat a hot dog instead of. - a lot of subsid



c) MRS \rightarrow the slope $\frac{MU_x}{MU_y}$



$I_1 \rightarrow$ indiff. cur.
 $I_2 \rightarrow$ indiff. cur.
 $I_3 \rightarrow$ indiff. cur.

Y - budget line

B. Marginal principle \rightarrow each X give me less "utility".

It shows relationship between utility of good x and y. Downward sloping is occurred by limited budget we have (downsloping) and maximizing of using of resources (goods). So if our budget is 10, good x = 2, good y = 1, the maximum amount of each good is x = 5 (2) then y = 0, y = 10 (1) then x = 0. Each consumption (combination) along this curve gives us differential utility.

MRS - how much ^{extra} utility we can have when subsid one of good.

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Uppgift nr /
Question no:

4

Poäng / Points
awarded:

5

Lärarens
anteckning
Examiner's remarks:

a) Det brukar oft förekomme
i Oligopoly.

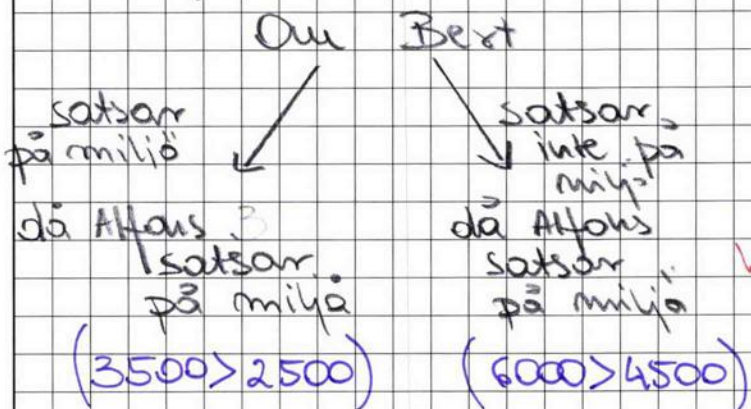
Oligopoly egenskaper:

- few firms
- homogeneous or different product
- high barriers to entry
- economy of scale (their target to achieve)
- price making & ex. labar
- kinked demand and sticky
- prices they are strategisk (dependent on each moves)

2

equal

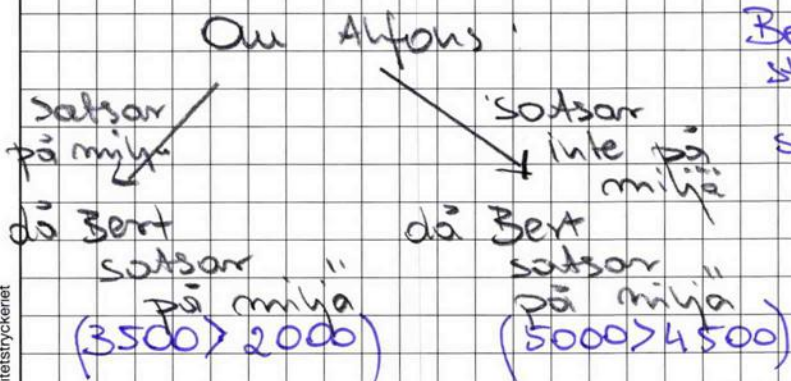
b) Alfons perspektiv:



Alfons dominant
"strategi"
är satsa på
miljövänlige
plastfleskar:

Why?
Doesn't matter
what Berts do
for Alfons is
efficient to
choose
to go in.

Berts perspektiv:



Berts dominant
strategi är oclosed:
satsa på miljövänlige
plastfleskar

Skriv ej i detta område
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c)

		B	
		satsa	ej
A	satsa	3500 3500 6000 2000	
	ej	2500 500 4500 4500	

Uppgift nr /
Question no:

4

Poäng / Points
awarded:

Lärarens
anteckning
Examiner's remarks:

Because both has a dominant strategy with "go in" utfallen is 3500 and 3500. (in this box both has its dominant strategy (satsa))

1