INSTITUTE OF ACTUARIAL & QUANTITATIVE STUDIES

Subject: **Business economics – Micro**

Chapter:

Category: **Assignment 1 solutions**

Answer 1

The impact on supply curve is given below

i) Glazed paper is an input to making tabletop calendars, decrease in cost will decrease the cost for tabletop calendars So supply curve will shift to the right

ii) Increase in price of wall hung calendars increase will increase opportunity cost of using skilled workers for making tabletop calendars Hence supply curve will shift to the left

iii) If the new process decreases the cost of production The supply curve will shift to the right

iv) If the felling trees become more difficult the cost of production will increase This will shift the supply curve to the left

Answer 2

Consumers wish to buy now whilst the price of rice is relatively cheap. This will lead to increase in demand and demand curve will shift to the right Suppliers will wish to hold back or defer supply so that they can sell their rice once price has risen. This will lead to decrease in supply of rice leading to supply curve shifting to left.

Both these speculative actions will lead to further rises in t prices of rice. This is an example of self- fulfilling speculation that has a destabilising effect on price.

Answer 3

The New Classical School believes

Firstly that individuals use all available information to form rational expectations

Secondly, that markets are continuously clearing

This would mean that any change in the money supply would have immediate effect on the prices and wages and no effect on output and unemployment

The key accompanying element is the real business cycle theory According to this theory the supply side shocks especially technology shocks permanently affect the economy's growth path

Answer 4

The Government can intervene in the free-market in the following manner:

• Price Control: The government can ask the firms to charge a price which is at a social optimum level. It can prevent the exploitation of consumers

• The government can have price floors or price ceilings. Price floors could cause government buy up excess supply which is expensive and it at the cost of taxpayers' money

• Government can use its talented resources like civil servants, economists, lawyers, and other technocrats in developing policy for the markets which maximises benefits rather that market forces taking their course

• Government has sometimes more information than the individuals and firms combined and hence can take better decision to protect the consumer welfare. E.G if the Government knows before the public about the incoming pandemic (before the public) it can manage the resources such as increasing the production and reducing the price of life savings drugs

• Governments can alter the taxes in a manner to cure the regional imbalance in the country. This would help reduce congestion and pollution hence leading to lower social costs

Answer 5

i) 5000 per quintal would mean 50 per KG

Q_s=7(P-50)
Q_s=7P-350 Here P is the new market price
Here P is the new market price per KG

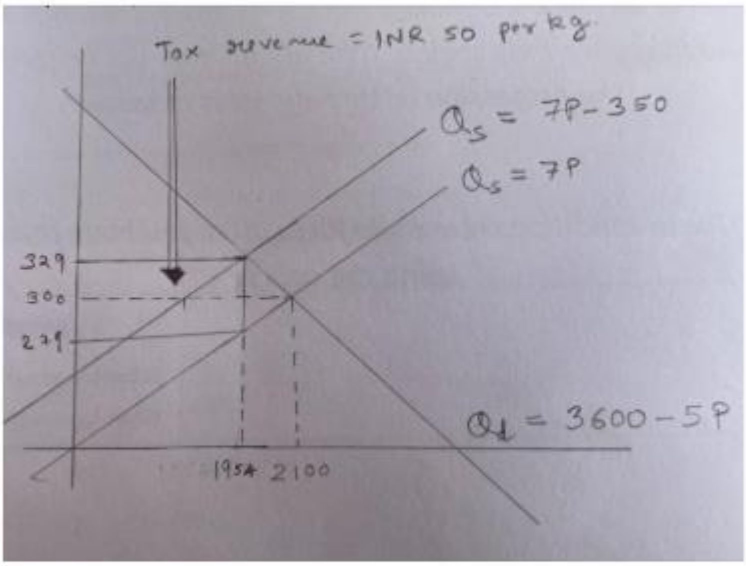
ii) The equilibrium quantity demanded before

Q_s=Q_d
7P=3600-5P
P=300 per KG
Q_d=2100 KG
New quantity demanded
7P-350=3600-5P
12P=3950
P=329 per KG
Q_d=1954 KG
The quantity demanded now versus previous 1954/2100= 93%
The reduction in quantity demanded is 7%

iii) Tax revenue shall be 50*1954=INR 97700

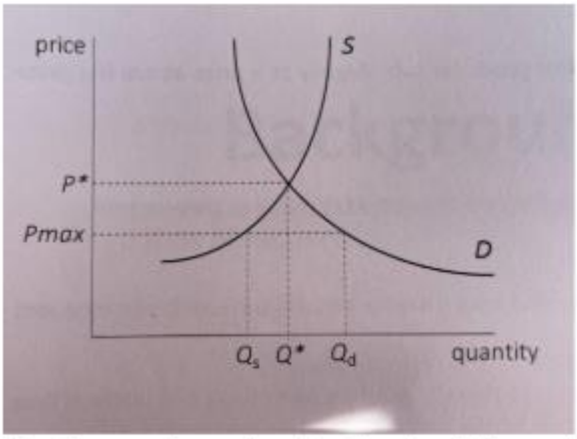
iv) From the above the new equilibrium price is INR 329 per KG. The price has risen by INR 29 because of the tax.
The consumer is bearing 29/50 that is 58% of the tax.
The producer is bearing 21/50 that is 42% of the tax

v)



Answer 6

A price ceiling is where government makes it illegal for to charge more than a certain amount for the good



The diagram shows the situation in which a price ceiling is set a price level below the free-market equilibrium price.

Advantages

• The lower price means that some people will be able to afford hand sanitisers who could not do so under free market equilibrium

• Otherwise, due to a huge demand the hand sanitisers would become unaffordable for certain sections of the society

Disadvantages

• With a price ceiling of Pmax suppliers will want to supply a quantity Qs whereas the consumers would demand a quantity Qd given the price ceiling is implemented.

• Hence there would be a shortage of Qd-Qs. A price ceiling set below the free market price therefore produces shortages

• This will lead to consumer demand not getting met. Since this is an essential item consumers demand not getting met would lead to bad consequences.

• This will increase the pressure on the government to use taxpayers' money to fund the shortage of supply

• The suppliers may get discouraged and exit the market leading to further shortage

Answer 7

Total utility is the total satisfaction derived from the consumption of goods within a given time period…

…whereas Marginal utility is the addition to total satisfaction derived from the consumption of one extra unit of a good within a given time period, assuming that the consumption of other goods is held constant.

The total utility derived from rice is high but for most of us the marginal utility of rice is very low.

We can consume nearly as much rice as we want so extra utility derived by extra spoon of rice is very low.

In contrast the total utility derived from diamonds is much lower that derived from rice because we consume so few of them.

This would mean the marginal utility of diamonds is much higher than that of rice.

It's not the total utility but the marginal utility that determines the price.

Higher marginal utility diamonds lead to its higher price.
If we were in a famine then the marginal utility of rice would be huge and we would be prepared to spend a huge amount of money for rice.
Finally, price is also dependent on demand and supply.
The supply of diamonds is very limited whereas the supply of rice is significantly high. Hence a lower price of rice.

Answer 8

i) This is not a perfectly contestable market.

To build flats a large amount of capital is needed which is not available with everyone. This requires a lot of expertise which may not be available with everyone.
This also requires approvals from the government which may be difficult to get.
Finally, this market has a brand loyalty. Because a person investing a huge amount to purchase flat may go for reliable brands and not the newcomers.

ii) This is a perfectly contestable market

To open a Grocery store you need a very little investment
There are no regulations or government permissions required.
There is no brand loyalty as people are more lured by the brands you keep in stock that your brand.
The customers will switch to another Grocery store if your prices are higher

iii) This is not a perfectly contestable market.

To operate an airline a large amount of capital is needed which is not available with everyone. To operate an airline, you need to hire pilots which may be in very short supply.
Hence you need to pay significantly more to poach them
This requires aircrafts which are not purchased off the shelf.
The time between order and delivery is huge and scaling up becomes very difficult

Answer 9
i) Marginal utility for G looks correct, it is decreasing with increasing number of units of G.
Whereas for H it is wrong. The first entry "10" is less than the next.

ii) Any of the following are acceptable
Make the first entry under Good H more than 12
Make the second entry under Good H less than 10
Interchange the first and second entries under Good H

iii) 1 mark for correct total for G 1mark for correct total for H

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iv) All combinations of G and H except 6 units of each will cost less than Rs. 100. 6 Units of G and 5 Units of H gives maximum utility of 99.

Answer 10.

i) Price Floor: Government often introduce minimum prices for agricultural produce in order to protect farmers' incomes. If left to the free market. Prices could be very volatile as supply is subject to changeable and unpredictable growing/rearing condition.

Assuming that the price floor is set above the free market equilibrium price P*, it will have the effect as shown in the Diagram-B.

With a price floor of P min, suppliers want to supply quantity Qs, but consumers will only demand quantity Qd. So the quantity traded will be Qd.

There is a surplus of (Qs-Qd). If the government wants to maintain the price floor, it will need to deal with the surplus.

Advantages of price Floor

• The guaranteed price provides farmers with a secure level of income regardless of fluctuations in the free-market price of their produce

• Without this support, farmers would suffer from volatile incomes and might leave the industry for occupations with a more predictable income.

• The public might not wish to see the decline of agricultural sector in a country for fear of being dependent on foreign countries for food and/or because of the consequences for the state of the countryside.

• A surplus could be stored in preparation for possible future shortages. [0.5] [Max 1 mark for advantages]

Disadvantages of Price Floor

• The government has to deal with the surplus, It could

o buy up surplus and store – Expensive

o Destroy it or sell it on the world market (at lower price than the floor price)

o Reduce it by giving producers fixed-production quota o Reduce it by encouraging consumers to buy more

o Reduce it by finding alternative uses for the product and hence increasing demand for it.

• If the government does not buy up the extra supply, some suppliers may be tempted to break the minimum price rule and offer goods for sale at less than the official minimum.

• The support given to the farmers might reduce efforts to improve efficiency.

• High prices for a particular product might discourage producers from producing alternative goods that they could produce more efficiently or which are in higher demand.

• Total consumption is lower than under the free market equilibrium, resulting in a loss of utility to consumers.

ii) Price Ceiling: The Diagram-A shows the situation in which a price ceiling is set at a price level below the free market equilibrium price P*.

With a price ceiling of Pmax, suppliers will want to supply Quantity Qs, whereas consumers will demand quantity Qd. The quantity traded will be Qs.

With only this amount available, a shortage of (Qd-Qs) will develop.

A price ceiling set below the free market price therefore produces excess demand and shortages.

Advantages of Price Ceiling:

- The lower price means that people will be able to afford the good who could not do so under the free market equilibrium.
- Such ceilings are common in wartime/pandemic when essentials such as food and clothing would otherwise be very expensive and unaffordable for the poor.

Disadvantages of Price Ceiling

- The available supply needs to be rationed, This could be done by
  - A formal system of rationing organised by government or agencies.
  - Queuing/waiting list
  - Random ballots
  - Firms adopting their own priorities , e.g. regular customers
- A shadow market may develop resulting in illegal sale of goods at a price above the price ceiling.
- Cost of enforcement.
- Total consumption may be lower than under free market equilibrium – with a consequent loss of utility to consumers.
- The lower price deters suppliers and encourage them to produce something else instead, thus reducing suppliers further in future.