

India's Number 1 Education App

## **ECONOMICS**

## BOOKS - SANDEEP GARG ECONOMICS (HINGLISH)

## **PRODUCER'S EQUILIBRIUM**

#### Example

- 1. On the basis of the information given below
- , determine the level of output at which the

producer will be in equilibrium . Use the mariginal cost- marginal revenue approach. Give reasons for your answer. Output (Units) Average Revenue (₹) 

Watch Video Solution

Total Cost (₹)

2. On the basis of following data , determine producer's equilibrium through marginal costmarginal revenue approach. Give reasons for

#### your answer.

Output (Units)	1	2	3	4	5	6	7
PTICE (₹)	24	24	24	24	24	24	24
Total Cost (₹)	26	50	72	92	115	139	165



#### 3. Determine producer's equilibrim from the

following data through MC-MR approach. Give

#### reasons for your answer.

Output (Units)	1	2	3	4	5
AR (?)	12	11	10	9	8
AC (₹)	4	5	6	7	9



**4.** From the following information about a firm, find the firms equilibrium output in terms of marginal cost and marginal revenue. Give

reasons . Also find profit at this output.

Output (Units)	1	2	3	4	5
Total Revenue or TR (₹)	7	14	21	28 .	35
Total Cost or TC (₹)	8	15	21	28 <sup>1</sup>	36



#### Watch Video Solution

#### HIGHER ORDER THINKING SKILLS

1. Why should MC curve cut MR curve from

below to achieve producer's equilibrium ?

#### View Text Solution

**2.** If MC is more than MR at a particular level output then how will a producer react to maximise the profits?

#### 3. A table showing TC and TR of a firm is given .

Calculate MC and MR find out the equilibrium

#### level of output.

level of output.

Output	1	2	3	4	5	6	7	8	9	10
TC	45	80	95	105	135	175	225	285	360	440
TR	40	80	120	160	200	240	280	320	360	400

Watch Video Solution

# **4.** The equality of marginal cost and marginal revenue is a condition necessary for

equilibrium , but it is not by itselt sufficient to

assure the attainment of producer's

equilibrium . Comment.



**5.** Why is the equality between marginal cost and marginal revenue necessary for a firm to be in equilibrium ? Is it sufficient to ensure equilibrium ? Explain.

View Text Solution

**6.** Explain why will a producer not be in equilibrium if the conditions of equilibrium are not met.



7. Elaborate the implication of the conditions

of equilibrium of a firm.

Watch Video Solution

**TRUE AND FALSE** 

**1.** At the state of producer's equilibrium marginal cost of the firm should be rising.

**Watch Video Solution** 

**2.** To maximize the profits of a firm , the only condition needed is equality between marginal cost and marginal revenue.

**3.** If marginal cost is equal to marginal revenue at two output levels, then any one of the output level can be taken as state of producer's equilibrium.

Watch Video Solution

**4.** Excess of marginal revenue over marginal cost is always better than equality between the two in order to achieve the equilibrium for a producer.

#### **Guidelines To NCERT**

**1.** What conditions must hold if a profitmaximising firm produces positive in a competitive market?

Watch Video Solution

2. Can there be a positive level of output that

a profit-maximising firm produces in a

competitive market at which market price is not equal to marginal cost ? Give an explanation.

Watch Video Solution

**3.** Will a profit-maximising firm in a competitive market ever produce a positive level of output in the renge where the marginal cost is falling

? Give an explanation.



**4.** Will a profit- maximising firm in a competitive merket produce a positive level of output in the short run it the market price is less than the minimum of AVC? Give an explanation.

View Text Solution

5. The following table shows the total revenue and total cost schedules of a competitive firm. Calculate the profit at each output. Determine

#### also the market price of the good.

Quantity sold (units)	0	1	2	3	4	5	6	7
TR (in ₹)	0	5	10	15	20	25	30	35
TC (in ₹)	5	7	10	12	15	23	33	40
Profit (₹)				_				

Watch Video Solution

**6.** The following table shows the total cost schedule of a competitive firm. It is given that the price of the good is Rs. 10. Calculate the profit at each output level. Find the profit maximising level of output.

Quantity sold	0	1	2	3	4	5	6	7	8	9	10	
TC (in ₹)	5	15	22	27	31	38	49	63	81	101	123	



Watch Video Solution

Revision

**1.** Producer's Equilibrium under MR-MC approach is achieved when :

A. MR=MC

B. MC > MR after the equality between

MR and MC

C. Either (a) or (b)

D. Both (a) and (b)

#### Answer: D

Watch Video Solution

**2.** \_\_\_\_\_ refers to a situation when a firm has no intention expand or contract the output.

A. Producer's Equilibrium

B. Market Equilibrium

C. Consumer's Equilibrium

D. None of these

#### Answer: A



**3.** Excess of receipts from sale of goods over expenditure incurred on producing them is termed as:

A. Average Revenue

#### B. Revenue

#### C. Profits

D. Marginal Revenue

#### Answer: C

Watch Video Solution

**4.** Producer is not at equailibrium when MC > MR bacause :

#### A. Profits can be increased by producing

more

B. Benefit is less than cost

C. Both (a) and (b)

D. None of these

Answer: B

5. The following diagram correctly depicts the producer's equilibrium in case of constant prices:





#### Answer: A



#### 6. In the following schedule , producer's

#### equilibrium is at \_\_\_\_\_

Output (Units)	1	2	3	4	5
MR (₹)	10	10	10	10	10
MC (₹)	12	10	8	10	15

#### A. 2 units

B. 4 units

C. 3 units

D. 5 units

Answer: B

Watch Video Solution

7. If MR is more than MC at a particular level of

output, then producer will:

A. Reduce production

- B. Increase production
- C. Keep the production at current level
- D. None of these

#### Answer: B

Watch Video Solution

8. In the following diagram , producer's equilibrium is achieved at poin \_\_\_\_\_



#### A. K

B. L

C. Both (a) and (b)

D. Neither (a) nor (b)

Answer: B



C. Firm has no inclination to expand

contract the output

D. All of these

#### Answer: D



**10.** In case of perfect competition a firm is in equilibrium when:

A. MC=MR

- B. MC cuts MR from below
- C. MC is rising when it cuts MR

D. All of these

#### Answer: D



A. Marginal Revenue, Marginal Cost

B. Marginal Cost, Marginal Revenue

C. Marginal Revenue, Average Cost

D. Average Revenue, Average Cost

#### Answer: B



**12.** If Marginal Cost =MC and Marginal Revenue=MR , then for achieving equilibrium output:

A. MC Curve should cut MR curve from above

B. MC Curve should cut MR Curve from below

C. MC Curve should not cut MR Curve at all

D. MC Curve should be tangent to MR

Curve

**Answer: B** 

Watch Video Solution

13. When price falls with rise in output , then

Producer's Equilibrium is achieved at:



- A. Point E
- B. Point F
- C. both (a) and (b)
- D. Neither (a) nor (b)

#### Answer: A



**3.** What is meant by equilibrium output of a producer?



**4.** What is the general profit maximising condition for a producer (MR and MC approach)?

5. Is it enough to say that profit is maximized

when MC=MR?



6. At a certain level of output, the marginal cost of a firm is above its marginal revenue.
Can this be its equilibrium output ?



7. What is Producer's Equilibrium ?

Watch Video Solution

#### **Unsolved Practicals**

**1.** From the following schedule , find out the level of output at which the producer is in equilibrium ,using marginal cost and marginal revenue approach. Give reasons for your

#### answer.

Price per unit (र)	8	7	6	5	4
Output (Units)	1	2	3	4	5
Total Cost (₹)	6	11	15	20	26



**2.** The TR and TC values of a firm are given in the following schedule. Calculate MR and MC. Also determine the level of output . At which producer's equilibrium is achieved?

Output (units)	1976 -	1	2	3	4	5	6	7
TR (₹)		20	40	60	80	100	120	140
TC (₹)		30	55	78	98	120	150	190



**3.** From the following table , find out the level of output at which the producer will be in

#### equilibrium . Give reasons for your answer.

Output (Units)	Marginal Revenue (₹)	Marginal Cost (₹)
1	8	10
2	8	8
3	8	7
4	8	8
5	8	9

#### Watch Video Solution

4. Give reason identify the equilibrium level of output and find and profit at this output using Marginal cost and marginal Revenue'

#### approach from the following:,

Output (Units)	Total Revenue (₹)	Total Cost (₹)
1	8	8
2	15	13
3	21	19
4	26	27
5	30	36



#### 5. Giving reasons identify the equilibrium level

of output and find profit at this output using

Marginal Cost and Marginal Revenue'

#### approach from the following:

Output (Units)	Total Cost (₹)	Total Revenue (₹)
1	7	7
2	13	14
3	20	21
4	28	28
5	37	35

**6.** From the following information about a firm ,find the firm's equilibrium output in terms of marginal cost and marginal revenue .Give

reasons. Also find profit at this output.

Output (Units)	Total Revenue (₹)	Total Cost (₹)
1	6	7
2	12	13
3	18	17
4	24	23
5	30	31

Watch Video Solution

**7.** Giving reasons find out the level of output at which producer will be in equilibrium .(Use

approach).

Output (Units)	Total Revenue (₹)	Total Cost (₹)
1	18	21
2	36	39
3	54	54
4	72	72
5	90	93



## 8. A producer can sell any quantity of a commodity at a given price of Rs. 10 per unit.

#### His cost schedule is given below:

Output (units)	1	2	3	4	5	6	
Total cost (₹)	12	22	31	38	48	60	

How many units should he produce to get

maximum profit ? Explain.



9. From the following about a producer find

out the level of output at which he will be in

#### equilibrium.

Output (units)	1	2	3	4	5
Price (per unit ₹)	10	9	8	7	6
Marginal Cost (₹)	10	6	3	4	7

**10.** Given below is the cost schedule of a producet produced by a firm. The market price per unit of the product at all levels of output is Rs 12. using marginal cost and marginal revenue approach. Find out level of equilibrium output. Give reasons for your

#### answer.

Output (Units)	1	2	3	4	5	6
Average Cost (₹)	12	11	10	10	10.4	11



**11.** From the following total cost and total revenue schedule of a firm. Find out the level of output suing marginal cost and marginal revenue approach , at which at firm would be in equilibrium . Give reasons for your answer.

Output (Units)	1	2	3	4	5
Total Revenue (₹)	10	18	24	28	30
Total Cost (₹)	8	15	21	25	33

#### Watch Video Solution

**12.** Identify the equilibrium level of output using marginal cost and marginal revenue

#### approach. Give reasons for your answer.

Price (₹)	Output (units)	Total Cost (₹)	Marginal Cost (₹)
10	1	10	10
10	2	19	9
10	3	26	7
10	4	36	10
10	5	48	12