

## Learning Key [02]

### Test Your Knowledge [TYK] Questions:

#### Model & Past Paper Questions [OTQs - MCQs]

**[01] Total cost of production for a short run firm from an economic perspective is best described in which of the following**

- (1) The sum of the opportunity cost of outside and own inputs such as land, machinery, equipment, buildings used in production
- (2) The money value of all inputs used within the production process
- (3) The sum of the total accounting and explicit costs of production
- (4) The opportunity cost of all inputs used in production
- (5) The sum of the opportunity cost of outside and own inputs such as raw materials, labour, utilities, fuel used in production.

**[02] Which of the following pairs of items are essentially 'Explicit' and 'Implicit' cost respectively.**

- 1) Rent and raw materials
- 2) Interest and, rates and taxes
- 3) Wages and rental or interest
- 4) Rates and taxes, and normal profits
- 5) Economic depreciation and normal profits

**[03] If there are implicit costs of production**

- (1) Accounting profit will exceed economic profit.
- (2) Economic profit will always be zero.
- (3) Economic profit will exceed accounting profit.
- (4) Accounting profit will always be zero.
- (5) Economic profit and accounting profit will be equal.

**[04] Which of the following statements is correct?**

- (1) Economic profit = accounting profit
- (2) Economic cost = explicit cost + implicit cost
- (3) Economic cost = explicit cost - implicit cost
- (4) Opportunity cost = economic profit
- (5) Accounting cost = implicit cost

Suppose you are given the following cost items (per month) for your uncle's 'Print Shop'

Paper, toner and other consumables	-	Rs. 25,000
Electricity and other utilities	-	Rs. 20,000
Rates and taxes	-	Rs. 10,000
Uncle's salary (as a former pastry chef)	-	Rs. 42,000
Market rent for Uncle's own shop building	-	Rs. 18,000
Salaries and wages	-	Rs. 40,000
Estimated monthly profits from a pastry shop	-	Rs. 10,000
Market value reduction of photocopier machine	-	Rs. 5,000

[05] The correct estimation of Total Direct and Indirect cost per month

	Total Direct Cost (Rs.)	Total Indirect Cost (Rs.)
01	95,000	75,000
02	55,000	115,000
03	97,000	113,000
04	75,000	95,000
05	113,000	57,000

[06] If the print shop's monthly turnover is Rs. 160,000, estimate the Accounting and Economic Profit/loss

	Accounting Profit (Rs.)	Economic Profit (Rs.)
01	65,000	(10,000)
02	105,000	(10,000)
03	63,000	(50,000)
04	85,000	(10,000)
05	47,000	10,000

[07] An economist calculates that a firm has incurred the following production costs over the course of a year.

Item	Cost (Rs. Thousands)
Wages and salaries	150
Opportunity cost of owner's time	40
Cost of materials	80
Rent and Interest on bank loans	75
Interest forgone on finance provided by owner	15

By how much does total cost as defined by an economist exceed the total cost as defined by an accountant?

- (1) Rs. 30,500.    (2) Rs. 55,000.    (3) Rs. 85,000.    (4) Rs. 305,000.    (5) Rs. 360,000.

**[08] In the short run, if a firm produces nothing, which of the following costs will be zero?**

- (1) Opportunity cost                      (2) Total variable cost                      (3) Total fixed cost  
 (4) Average total cost                      (5) Total cost

**[09] The vertical distance between the total cost (TC) and total variable cost (TVC) curves is**

- (1) Decreasing as output decreases.                      (2) Increasing as output decreases.  
 (3) Equal to marginal cost (MC).                      (4) Equal to total fixed cost (TFC).  
 (5) Equal to average fixed cost (AFC).

**[10] When the marginal product of labour is equal to average product of labour**

- (1) Marginal product of labour is at its maximum  
 (2) Marginal cost of production is at its minimum  
 (3) Marginal cost is equal to minimum average variable cost.  
 (4) Average total cost is at its minimum.  
 (5) Total product of labour is at its maximum

**Model Objective Test Questions [OTQs]:**

**State if the following statements / assertions are True [T] or False [F]**

- [01] If a business has supernormal profits, essentially there will be accounting profits, and not vice versa.
- [02] Normal profits and amortization payments are highly specific economic examples for fixed cost in production
- [03] Diminishing returns to scale and diseconomies of scale are conceptually the same
- [04] If marginal cost (MP) is below average product (AP) then MC must be rising
- [05] When marginal product equals average product (i.e  $MP = AP$ ), average variable cost curve will be at its lowest

**Structured Essay Type Questions [SEQs]** [Past paper based]

[1] **Distinguish** between **explicit (direct)** and **implicit costs**. What are some of your explicit and implicit costs as a result of you attending school?

[04 marks] [2015A/L, 2019 A/L]

[2] Why do economist regard **normal profits** as a **cost**

[04 marks] [2015 A/L]

[3] What is the difference between Accounting Profits and Economic Profits

[04 marks] [2023 A/L]

[4] **Classify** the following expenditure into **fixed costs** and **variable costs**

- (A) Raw Materials
- (B) Rent of the factory building
- (C) Interest on borrowings
- (D) Fertilizer

[04 marks] [2021 A/L]

## Application and Self Practice Questions:

### Application Question [1]

Assume the information given below is with regards to a certain manufacturing business for the financial year 2022/23

Total Product	500	
Price of a unit of output	Rs. 20	
Salaries and wages expenditure		Rs. 1000
Foregone wage/salary incomes		Rs. 500
Expenditure on raw materials purchased		Rs. 2000
Economic depreciation		Rs. 200
Expenditure on fuel and electricity		Rs. 500
Interest payments on bank loans		Rs. 800
Foregone interest incomes		Rs. 100
Normal profits		Rs. 1000

- Estimate:
- (A) Total Revenue
  - (B) Total Direct Cost
  - (C) Total Indirect Cost
  - (D) Accounting Profit/Loss
  - (E) Total Opportunity Cost
  - (F) Economic Profit/Loss

### Application Question [2]

Piece-rate wage expense	-	Rs.40,000
Raw materials	-	Rs.120,000
Interest expense	-	Rs.12,000
Fuel expenditure	-	Rs.20,000
Rent expense	-	Rs.8,000
Output in units	-	2000

- (A) Estimate ATC
- (B) Estimate AVC
- (C) If the total output was sold at Rs.120.00 per unit, estimate economic profits

**Self-practice Question [3]**

Assume a company in the printing business with an annual turnover of Rs.250,000 for a month. The expenditure incurred by the company during the month can be given as follows.

Paper and toner	-	40,000	Electricity	-	10,000
Wages	-	60,000	Interest on Bank loan	-	5000

**Additional Information**

- If the initial amount invested to buy capital goods was invested in an alternative form of investment, a net interest income of Rs. 30,000 per month could have been earned.
- The value of capital equipment in the beginning of the month was Rs. 250,000 and the month-end value was estimated at Rs. 220,000.
- The income the owner could have earned by providing his labour for another activity per month is Rs. 30,000.

**Requirements**

- (A) Total Direct cost and Total Indirect cost
- (B) Total Economic Cost
- (C) Accounting profit and economic profit

**Application Question [4]**

The following table presents cost information of a short run firm. Estimate the Total Fixed Cost (TFC) and Average Fixed Cost (AFC) of producing 5 units.

Output (units)	Total Cost (Rs.)	Marginal Cost (Rs.)
1	200	20
2	215	15
3	225	10
4	240	15
5	260	20
6	285	25

**Application Question [5]**

The Total Variable Cost (TVC) for a firm in its short run, over a certain range of output is given below. Estimate the Marginal Cost of the 5<sup>th</sup> unit of output.

Output (units)	Total Variable Cost (Rs.)
1	5
2	20
3	40
4	70
5	110
6	160
7	220

[02 marks each]

**Application Question [6]**

The table below shows total cost for a firm at different levels of output in the short run

Output Level	Total Cost (Rs.)
0	100
1	120
2	130
3	138
4	160
5	190
6	238

**Average Variable Cost (AVC) and Average Fixed Cost (AFC) of producing 4 units of output**

**Study Notes/Workings:**