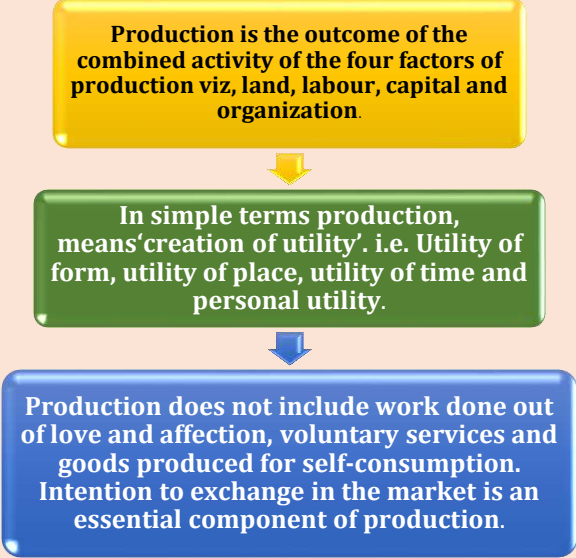
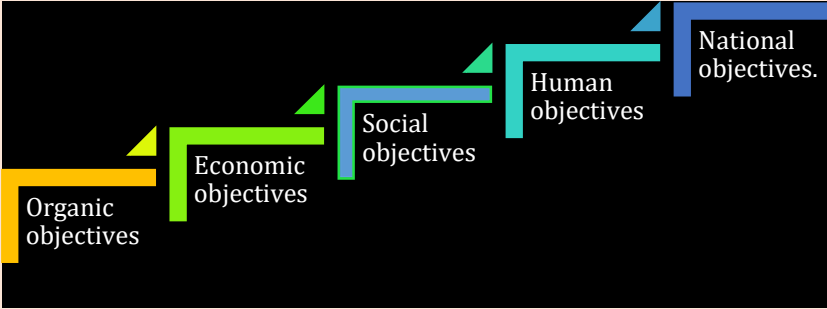


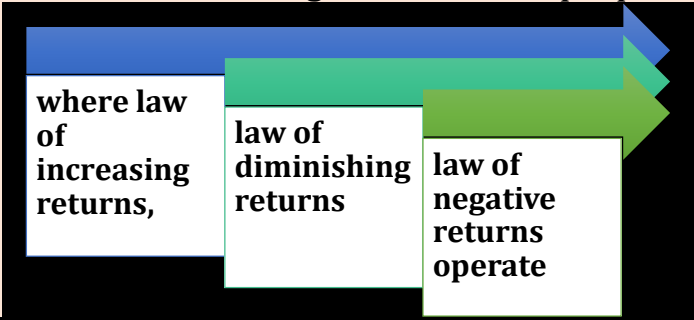
# CH 3: THEORY OF PRODUCTION AND COST

## UNIT: 1

### THEORY OF PRODUCTION

<p><b>Production</b></p>	
<p><b>Land</b></p>	<p>Land includes all those free natural resources whose supply for the economy as a whole is fixed.</p>
<p><b>Labor</b></p>	<p>Labor is all human efforts of body or of mind undergone partly or wholly with a view to secure an income apart from the pleasure derived directly from the work</p>
<p><b>Capital</b>  <b>Capital formation.</b></p>	<p>Capital is that part of wealth an individual or community which is used for further production of wealth capital a stock concept refers to product means of production and it comprises of man – made machines and materials which are used for further production</p> <p>Capital formation, also known as investment means a sustained increase in the stock of real capital in a country.</p>

	<p>There are mainly three stage of capital formation viz. Saving which depends on ability to save and willing to save; Mobilization of savings which depends on availability of financial Institution of product; and Investment I.e. the process whereby the real saving get covert into real capital assets</p>
<p><b>Entrepreneur</b></p>	<p>Entrepreneur is the person who organizes business; initiates production, remunerates other factor of production introduces and bear the risk and uncertainties of business.</p>
<p><b>The objectives of entrepreneur</b></p>	<p>The objectives of an enterprise may be broadly categorized under the following heads</p> 
<p><b>Problem face by enterprise</b></p>	<p>An enterprise faces a number of problems from its inception through its life time and till its closure these may relate to objective, location, size, physical facilities, finance, organization structure, and marketing. Legal formalities and industrial relations.</p>
<p><b>Factor of production</b></p>	<p>Factors of production can be divided into two categories – fixed factors are those factors whose quantity remains unchanged with changes in output within a capacity and variable factors are those the quantity of which change with a change in the level of outputs</p>
<p><b>Production Function</b></p>	<p>Production function is the technical relationship between inputs and outputs. Samuelson describes production function</p>

	as then relationship between the maximum amount of output that can be produced and the inputs required to make that output it is defined for a given state of technology
<b>The law of diminishing returns</b>	The law of variable proportion or the law of diminishing returns is relevant when some factor are kept fixed and other are varied it is applicable to the short – run
<b>There are three stages of the law of variable proportion</b>	<p>There are three stages of variables proportion</p> 
<b>Total product</b>	Total product is the total output resulting from the efforts of all the factor of production combined together at any time.
<b>Marginal product</b>	Marginal product is the change in total product per unit change in the quantity of variable factors.
<b>Average product</b>	Average product is the total product per unit of the variable factors.
<b>The law of returns to scale</b>	The law of returns to scale describes the relationship between inputs and outputs in the long run when all inputs are changed in the same proportion. Returns to scale may be constant increasing and decreasing
<b>Constant returns to scale</b>	Constant returns to scale occur when the inputs increase by some proportion and the outputs also increases by the same proportion it is also called liner homogeneous production function.

<b>Increasing returns to scale</b>	Increasing returns to scale occur when the inputs increase by some proportion and the output increase more than proportionately
<b>Decreasing returns to scale</b>	Decreasing returns to scale occur when the inputs increase by some proportion and the outputs increases less than proportionately
<b>Production indifference curve</b>	Isoquants or product indifference curves shows all those combination of different factors of production which gives the same output to the producer.
<b>Isocost lines</b>	Is cost lines show various combination of two factors which the firm can buy with given expenditure or outlay
<b>Minimize his cost of production</b>	By combining Isoquants and isocost lines a producer can find out the combination of factors of production which is optimum i.e. the combination of factors of production which would minimize his cost of production



### **Question 1**

**\_\_\_ shows the overall output generated at a given level of input:**

- (a) Cost function (b) Production function  
(c) ISO cost (d) Marginal rate of technical

**Answer: b**

**Explanation:**

Production function states the relationship between input and output generated.

**Question 2****Define Average Product (AP)**

- (a) AP is the total product per unit of a Variable input
- (b) AP is the change in total product Consequent upon a change in Variable input
- (c) Both
- (d) None

**Answer: a****Explanation:**

The quantity of total output produced per unit of a variable input holding all other Inputs fixed Average product usually abbreviated AP is found by dividing total of Product by the quantity of the variable inputs,

**Question 3****What is meant by production function?**

- (a) Technological relationship of inputs and outputs
- (b) Technological relationship of output
- (c) Technological or an engineering in Relationship between inputs and Outputs
- (d) None

**Answer: c****Explanation:**

A production function is a technological or an engineering relationship between inputs and out puts

A production function is usually written as:

$$Q = f(a, b, c, d, \dots)$$

Where Q is the amount of outputs; and a, b, c, d, etc are inputs though production function refers to a technological relationship the concept is useful in Economic theory ad it is related to the cost of production of a unit.

**Question 4****\_\_\_show all those combinations of different factor of production which give the same Output to the producer**

- (a) Isoquant
- (b) Production indifference curves
- (c) Both a and b
- (d) None

**Answer: c****Explanation:**

An isoquant shows different combination of two inputs that produces a specified amount of output. On an isoquant same level of output is obtained by using different combination of two Inputs. That is why an isoquant is called production indifference curve.

**Question 5****When average product falls, marginal product is**

- (a) More than average product                      (b) Less than average product  
(c) Equal to average product                      (d) None

**Answer: b****Explanation:**

When average product falls, marginal product is less than the average product.

**Question 6****In short run the input are \_\_\_**

- (a) Vary    (b) Fixed  
(c) Variables    (d) None

**Answer: b****Explanation:**

Short run is that period when a firm cannot change all its inputs; some are held fixed. Outputs can therefore be increased by changing only variable inputs and in long period is that time period when the firm can change all its inputs including fixed inputs. In the long run all inputs are therefore.

**Question 7****Isoquants are equal to:**

- (a) Product line    (b) Total utility lines  
(c) Cost lines    (d) Revenue

**Answer: a****Explanation:**

A consist of alternative combinations of inputs to produce a given quantity of outputs. And product lines are lines representing various combination of factor of production to produce a given outputs.

**Question 8****The marginal product curve is above the average product curve when the average product is:**

- (a) Increasing    (b) Constant  
(c) Decreasing    (d) None

**Answer: a****Explanation:**

Marginal product and average product are so related that when average product increase, MP increase at a faster rate and cuts AP at its Maximum and when AP falls as a faster rate so the marginal Product curve is above average product curve when AP is increasing.

**Question 9****Increasing returns to scale can be explained in terms of:**

- (a) External and internal economics      (b) External and internal diseconomies  
 (c) External economics internal diseconomies.      (d) All of these

**Answer: a****Explanation:**

Increasing returns to scale i.e. when output increase more than the increase in outputs it occurs due to external and internal economics.

**Question 10****An isoquant\_\_to an ISO cost line at equilibrium point:**

- (a) Convex      (b) Tangent  
 (c) Concave      (d) Perpendicular

**Answer: b****Explanation:**

An ISO quant is tangent to an ISO cost line. This point of tangency defines the equilibrium position Of a firm a higher isoquant shows an unalterable point and a lower one show underutilized Resources Hence an isoquant with an is cost line as tangent is the equilibrium position.

**Question 11****Diminishing marginal returns implies:**

- (a) Decreasing average variable      (b) Decreasing marginal costs  
 (c) Increasing, marginal cost      (d) Decreasing average fixed costs

**Answer: c****Explanation:**

Keeping other things constant when marginal cost increases with a considerable increase on variable factor the marginal product decline this is the second stage of law of variable Proportion or the stage of diminishing returns.

**Question12****Law of variable proportion is valid when:**

- (a) Only one inputs is fixed and all other Inputs are kept variable      (b) All factor are kept constant  
 (c) All inputs are varied in the same Proportion      (d) None of these

**Answer: a****Explanation:**

Law of variable proportion occurs in short run. Short run is a period defined when only one input is fixed and all other inputs are kept variable.

### **Question 13**

**Increase in all inputs leading to less than proportional increase in outputs is called\_\_**

- (a) Increase returns to scale  
(b) decrease returns to scale  
(c) Constant returns to scale  
(d) Both increasing and decreasing returns to scale

**Answer: b**

#### **Explanation:**

Decreasing returns to scale is the stage when the increase in output is less than the increase in input, this occurs due internal and external diseconomies.

### **Question 14**

**Consider the following combinations of inputs and outputs This production technology Satisfies**

5	10	1
6	12	2
7	14	3
8	16	4
9	18	5
10	20	6

- (a) Increasing returns to scale  
(b) decreasing returns to scale  
(c) Constant returns to scale  
(d) both increasing and decreasing returns to scale

**Answer: c**

#### **Explanation**

In the given production technology, the increase in inputs is proportionate to the increase in Output With an increase of every 1 unit of labor and 2 units capital the output increases By 1 unit Hence it is the case of constant returns to scale as both fixed and variable factors Are changing (all factors are variable).

### **Question 15**

**Returns to scale will said to be in operation when quantity of:**

- (a) All inputs are changed  
(b) All inputs are changed in already establish proportion  
(c) All inputs are not changed  
(d) One inputs is changed while



quantity of all other inputs remain the same.

**Answer: b**

**Explanation:**

Returns to scale come into operation when all inputs whether fixed or variable are changed in same proportion i.e. the scale of production changes

### **Question 16**

**During IInd stage of law of Diminishing returns:**

- (a) MP and TP is maximum (b) MP and AP decreasing  
(c) AP is negative (d) TP is negative

**Answer: b**

**Explanation:**

During the second stage of Law of Diminishing returns ( i.e. Law of variable proportion) Both MP and AP are decreasing because at this stage the optimum combination between Fixed and variable factors have been attained and now if the inputs is increased output starts Decreasing AT this stage total product increases at a diminishing rate i.e. MP and AP decrease.

### **Question 17**

**Consider the following table:**

Labor	Total output	Marginal product
0	-	-
1	100	100
2	-	80
3	240	-

**What is the total output, when 2 labors are employed?**

- (a) 80 (b) 100  
(c) 180 (d) 200

**Answer: c**

**Explanation:**

When 1 unit of labor is employed TP = 100, MP = 100 when 2<sup>ND</sup> Unit of labor

Labor is employed MP = 80 i.e. Addition made to total product is 80.

Total product when 2 labor are employed is  $100 + 80 = 180$

OR

$$MP_2 = TP_2 - TP_{2-1}$$

$$80 = TP_2 - 100$$

$$TP_2 = 80 + 100 = 180$$

### **Question 18**

**Who has given the concept of Innovates Entrepreneurship?**

- (a) Robbins (b) Schumpeter  
(c) Adam Smith (d) Sweezy

**Answer: b****Explanation:**

The concept of Innovative Entrepreneurship was given by Schumpeter.

**Question 19**

At 10 units total cost - > RS 200

20 Units total cost - > RS. 600

**Marginal Cost?**

- (a) 50 (b) 30  
(c) 40 (d) 400

**Answer: c****Explanation:**

Given Original total cost = 200

Original quantity produced = 10 units

New total cost = 600 New quantity produced = 20 units

Marginal cost is the addition made to the total cost by production of an Additional quantity product

= 20 units - 10 units

= 10 units

=  $\frac{400}{10} = \text{Rs. } 40$

**Question20**

Average Fixed Cost = 20

Quantity produced = 10 units

What will be the Average Fixed Cost of 20<sup>th</sup> unit?

- (a) 10 (b) 20  
(c) 5 (d) None

**Answer: a****Explanation:**

Average Fixed cost (AFC) is the total cost divided by the number of

Units produced i.e.  $AFC = \frac{TFC}{Q}$

Where Q is the number of units produced

$TFC = 20 \times 10 \text{ UNITS}$

= 200

Q = 10 Units

$AFC = \frac{200}{20}$

= 10

Since AFC steadily falls as outputs increase hence for 20<sup>th</sup> unit AFC is 10.

### **Question 21**

**Production activity in the short run is analyzed by,**

- (a) Returns to scale (b) Economics of scale  
(c) Law of variable proportion (d) None of these

**Answer: c**

**Explanation:**

Short run is a time period when only one factor is fixed and rest all are variable Law of Variable proportion operates in the short run therefore in short run production activity Is analyzed by this Law,

### **Question 22**

**Law of diminishing returns of application**

- (a) Only manufacturing industries (b) Only agriculture  
(c) Neither in agriculture nor in industries (d) In all economic activities after a limit

**Answer: d**

**Explanation:**

Law of diminishing returns states that as more and more factors of production are employed the .The total product first increases and then eventually declines. This law to all economics activities after limits.

### **Question 23**

**Law of diminishing returns to:**

- (a) Manufacturing industries (b) Agriculture  
(c) Any economic activity at a point of time (d) None

**Answer: d**

**Explanation:**

Law of diminishing return states that as more and more factors of production are employed the total production first increase and then eventually decline. This law applies to all economic activities after a limit.

### **Question 24**

**Law of increasing returns is applicable of\_\_\_\_\_**

- (a) Indivisibility of factors. (b) Specialization  
(c) Economics of scale (d) both (a) & (b) above

**Answer: d**

**Explanation:**

The two causes of Law of Increasing Returns are:

- Indivisibility of factors.
- Division of labor and specialization

Hence both option A and B

### **Question 25**

**In the first of law of variable proportions total product increase at the\_\_\_\_\_**

- (a) Decreasing rate (b) Constant rate  
(c) Increasing rate (d) Both a and b

**Answer: c**

**Explanation:**

The law of Variables proportion states as we increase the quantity of one input which is combined with other fixed inputs three stages (law) are:

- Law of increasing returns
- Law of decreasing returns
- Law of negative returns

### **Question 26**

**Which statement is correct about product marketing?**

- (a) The average product is at its maximum  
When product is equal to average Product.  
(c) Economics of scale arise only because of Indivisibilities of factor proportion
- (b) The law of increasing returns to scale relates To the effect of change in factor Proportions.  
(d) Internal economics of scale can accrue on to the exporting sector

**Answer: a**

**Explanation:**

The average product is at maximum when marginal product is equal to average product.

### **Question 27**

**Factor of Product does not Includes:-**

- (a) Land (b) Labor  
(c) Capital (d) Machine

**Answer: d**

**Explanation:**

**Factor of Production:**

- Land

- Labor
- Capital
- Entrepreneur

**Question 28**

**State the statement with reason “labor has poor bargaining power”:-**

- (a) True (b) False  
(c) Either a or b (d) None

**Answer: a**

**Explanation:**

Labor has poor bargaining power: Labor has a weak bargaining power. Labor has no reserve Price. Since labor cannot be stored, the laborer is compelled to work at the employers.

**Question 29**

**The “law of diminishing returns” applies to:**

- (a) The short run, but not the long run. (b) The long run, but not the short run.  
(c) Both the short run and the long run (d) Neither the short run nor the long run

**Answer: a**

**Explanation:**

The law of diminishing returns applies in the short run because only some factors are fixed.

**Question 30**

**Which one of the following is also known as planning curve?**

- (a) Long run average cost curve. (b) Short run average cost curve  
(c) Average variable cost curve. (d) Average total cost curve.

**Answer: a**

**Explanation:**

A long run average cost curve is known as a planning curve. This is because a firm Plans to produce an output in the long run by choosing a plant on the long run average cost curve corresponding to the output.

**Question 31**

**Increasing return to scale to.**

- (a) Output increase in a greater proportion Than the increase in inputs (b) Input increases in a greater proportion than the increase in outputs  
(c) Both (d) None

**Answer: a**

**Explanation:**

Increasing returns to scale means that output increases in a greater proportion than the increase in inputs when a firm expands; increasing returns to scale are obtained in the beginning.

**Question 32**

**The objectives of enterprise include.**

- (a) Economics objectives (b) National objectives  
(c) Human objective (d) All of the above

**Answer: d**

**Explanation:**

The objective of an enterprise may too broadly categorize under the following heads:

- (i) Organic objective (ii) Economic objectives (iii) Social objective (iv) Human objective (v) National objective

**Question 33**

**“Returns to scale may be constant”. State this statement with reason.**

- (a) True (b) False  
(c) Can't say (d) None

**Answer: a**

**Explanation:**

Returns to scale may be constant, increasing and decreasing

**Question 34**

**Production also includes voluntary services & goods produces for self-consumption.**

- (a) True (b) false  
(c) Can't say (d) None

**Answer: b**

**Explanation:**

Production does not include work done out of love and action, voluntary services and goods produced for self-consumption Intention to exchange in the market is an essential component of production.

**Question 35**

**Capital refers to physical goods is known as:**

- (a) Tangible capital (b) Circulating capital  
(c) Real capital (d) None

**Answer: c**

**Explanation:**

Real capital refers to physical goods such as building, plant, machines, etc

### **Question 36**

**Capital formation involves production more:-**

- (a) Capital goods (b) Necessary goods  
(c) Agriculture goods (d) None

**Answer: a**

**Explanation:**

Capital formation involves production of more capital goods like, machines, tools, factories, Transport, equipment, electricity etc. which are used for further production of goods

### **Question 37**

**A fixed input is defined as:**

- (a) That input whose quantity can be quickly changed in the short run in response to the desire of the company to change its production  
(b) That input whose quantity cannot be to quickly changed in the shot, run in Responses change its production.  
(c) That input whose quantities can be easily changed in response to the desire to increase or reduce the level of production  
(d) That input whose demand can be easily changed in response to the desire to increase or reduce the level of Production.

**Answer: b**

**Explanation:**

That input whose quantity cannot be quickly in the short run, in response to the desire of the company to change its production is known as fixed inputs

### **Question 38**

**Which of the following statement is correct?**

- (a) Fixed costs vary with change in output  
(b) If we add total variable cost and total Fixed cost we Get the average cost.  
(c) Marginal cost is the result of total cost Divided by number of units produced  
(d) Total cost is obtained by adding up the fixed cost and total variable cost

**Answer: d**

**Explanation:**

Total cost (ATC) can be found by adding average fixed costs (AFC) and average variable costs (AVC)

**Question 39****Which of the following statements is true?**

- (a) The services of a doctor are considered production  
 (b) Man can create matter.  
 (c) The services of a housewife are considered Production  
 (d) When a man creates a table he creates Matter.

**Answer: a****Explanation:**

In economics Services provided by doctor is also consider as production therefore the option A is true.

**UNIT: 2**  
**THEORY OF COST**

<b>Cost</b>	Cost analysis refers to the study of behavior of cost in relation to one or more production criteria. It is concerned with the financial aspect of production
<b>Accounting cost</b>	Accounting costs are explicit costs and includes all the payments and charges made by the entrepreneur to the supplier of various productive factor
<b>Economic costs</b>	Economics costs take in to account explicit costs as well a simplicity costs. A firms has to cover its economics cost if it wants to earn normal profit
<b>Outlay cost</b>	Outlay costs involve actual expenditure of founds.
<b>Opportunity coat</b>	Opportunity cost is concerned with the cost of the next best alternative opportunity which was fore go one in order to pursue a certain action.
<b>Direct cost</b>	Direct cost is those which have direct relationship with a component of operation. They are readily identified and are trace able to a particular product operation or plant



<b>Indirect cost</b>	<b>Indirect cost is those which cannot be easily and definitely identifiable in relation to a plant, product, process or department they not visibly traceable to any specific goods, service process, departments or operation</b>
<b>Incremental cost</b>	<b>Incremental cost refers to the additional cost incurred by a firm as a result of a business decision</b>
<b>Sunk costs</b>	<b>Sunk costs are already incurred once and for all, and cannot be recovered</b>
<b>Historical costs</b>	<b>Historical cost refers to the cost incurred in the past on the acquisition of a productive assets</b>
<b>Replacement cost</b>	<b>Replacement cost is the money expenditure that has to be incurred for replacing an old asset.</b>
<b>Private cost</b>	<b>Private costs are costs actually incurred or provided for by firms and are either explicit or implicit.</b>
<b>Social cost,</b>	<b>Social cost, on the other hand, refers to the total cost borne by the society on account of a business activity and included private cost and external cost.</b>
<b>Cost function</b>	<b>The cost function refers to the mathematical relation between cost and the various determinate of cost; it expresses the relationship between cost and outputs. Economists are generally interested in two types of cost function; the short run cost function and the long run cost function.</b>



### Question 1

The following table of data describes the operation of a firm over a limited output range, and is used for the next 5 question

<b>Output</b>	0	1	2	3	4	5	6	7	8	9	10
<b>Total cost</b>	100	120	140	160	220	300	450	600	1,000	2,500	5,000

#### Question 1.1

**Fixed costs**

The fixed costs for the firms are:

100
10
5
Not able to be calculated from the data

**Answer: a**

**Explanation:**

FC is the cost of 'output zero'. It is the cost to production in the short - run.

#### Question 1.2

**Average cost**

The average cost of production when 5 items were made is:

- (a) 55 (b) 60  
(c) 75 (d) 86

**Answer: b**

**Explanation:**

$Ac = TC / \text{output}$ . In this case, for 5 units,  $300 / 5 = 60$

#### Question 1.3

**Marginal cost**

The marginal cost of the 7<sup>th</sup> unit is:

- (a) 450 (b) 150

(c) 400

(d) 600

**Answer: b****Explanation:**

It helps to know your definitions. Answer. Marginal cost of 7<sup>th</sup> = TC of 6<sup>th</sup> – TC of 7<sup>th</sup> = 600 – 450 = 150

**Question 1.4****Variable cost per unit****The variable cost per unit when 4 units are made is:**

(a) 20

(b) 58

(c) 40

(d) 30

**Answer: d****Explanation:**

VC per unit = TVC / output From the table AVC is at output 3 = 20, 4 = 30, 5 = 40, 6 = 58. Now read off the answer. It is 30

**Question 1.5****The firm exhibits diminishing returns to the variable factor from the:**(a) 2<sup>nd</sup> unit made(b) 3<sup>rd</sup> unit made(c) 5<sup>th</sup> unit made(d) 5<sup>th</sup> unit made**Answer: b****Explanation:**

Diminishing returns = rising AVC. AVC is: at output 1 = 20, 2 = 20, 3 = 30, 4 = 30, 5 = 40, 6 = 58, 7 = 71. Constant returns up until 3 units and then diminishing.

**Question 2****Which cost increase continuously?**

(a) Fixed cost

(b) Total Cost

(c) Variable cost

(d) None of them

**Answer: c****Explanation:**

A variable cost is corporate expense that changes in proportion with production outputs. Variable costs increase or decrease depending on a company's production volume: they rise as production increases and fall as production decreases.

**Question 3****Opportunity cost is:-**

(a) Direct cost

(b) Accounting cost

(c) Total cost

(d) Cost of foregone opportunity

**Answer: d****Explanation:**

Opportunity cost is the cost of the next best alternative foregone. It's the cost of foregone decrease.

**Question 4****As output increases, average fixed cost:**

(a) Remains constant

(b) Accounting cost

(c) Starts falling

(d) None

**Answer: a****Explanation:****Average fixed cost is expressed as:**

$$AFC = \frac{\text{Fixed cost}}{\text{NO.OF unit product}}$$

Fixed cost always remains fixed. It does not increase with an increase in output. So the Average fixed cost falls as more and more units are produced as the fixed cost remains the same.

**Question 5****If LAC curve fall as output expands, this is due to\_:**

(a) Law of diminishing returns

(b) Economics of scale

(c) Law of variable proportion

(d) Diseconomies of scale

**Answer: b****Explanation:**

In the long run, when output expands total increase then becomes constant and finally decreases. When output expands, and cost curve falls it is the first stage of returns to scale which occurs due to economics.

**Question 6****Average fixed cost can be obtained through:**(a)  $AFC = TFC/TC$ (b)  $AFC = TFC /TS$ (c)  $AFC = TC/TC$ (d)  $AFC = TFC/TU$ **Answer: d****Explanation:**

$$\text{Average fixed cost} = \frac{\text{FIXED COST}}{\text{NO.Of unit produced}}$$

In given Question,

AFC = Average fixed cost TFC = Total fixed cost

TU = Total no. of units produced.

**Question 7****AFC curve is:**

- (a) Convex & downward slopping      (b) Convex & upward slopping  
 (c) Concave & downward slopping      (d) Concave & upward rising

**Answer: a****Explanation:**

Average fixed cost always decrease with an increase in output so the AFC curve is Convex and downward slopping.

**Question 8**

**A firm's average fixed cost 20 at 6 units of output what will it be at 4 units of outputs**

- (a) 60      (d) 40  
 (c) 30      (b) 20

**Answer: c****Explanation:**

$$\text{Average fixed cost} = \frac{\text{FIXED COST}}{\text{NO.of unit produced}}$$

$$20 = \frac{TFC}{6}$$

$$\text{So Total fixed cost} = 20 \times 6 \\ = \text{Rs. } 120$$

So Average fixed cost of unit of 4 units of outputs

$$AFC = \frac{TFC}{\text{NO.Of unit}}$$

$$AFC = \frac{120}{4}$$

$$= \text{Rs. } 30$$

**Question 9**

**U - Shaped average cost curve is based on: \_\_**

- (a) Law of increasing cost      (b) Law of decreasing cost  
 (c) Law of constant returns to scale      (d) Law of variable proportions

**Answer: d****Explanation:**

Average cost curve is U shaped due to Law of variable proportion in the first stage To increase so AC decreases then to becomes constant and finally T.P Becomes constant and finally T.P becomes to Constant and finally T.P decrease and Ac increase. Hence, it gives U shape to the average cost curve

**Question 10**

**Economics cost excludes which of the following:**

- (a) Accounting cost + explicit cost      (b) Accounting cost + implicit cost  
 (c) Explicit cost + Implicit cost      (d) Accounting cost + opportunity cost

**Answer: a**

**Explanation:**

Economics cost takes into accounting (explicit) cost and in addition to this it also includes amount of money the entrepreneur could have earned if he had investment his money and sold his service and other factors in the next best alternative use in a nutshell -

Economics Cost = Implicit cost + Explicit cost

Or = Accounting cost + Implicit cost

Or = Accounting cost + opportunity cost

**Question 11**

**Which of the following cost curves is never 'U' shaped**

- (a) Average total cost      (b) Marginal cost curve  
 (c) Total cost curve      (d) Total fixed cost curve

**Answer: d**

**Explanation:**

Total fixed cost refers to the cost which remains same even if the production total increases fixed cost has no effect with an increase or decrease in production Example of such cost are rent of facto electricity charges etc. Since fixed coat always remains constant so the fixed cost curve is not U shaped but a straight line.

**Question 12**

**Suppose the total cost of production of commodity X is 1, 25,000 out of this cost are 35,000 and normal profits are 25, 000 what will be the explicit cost of commodity X?**

- (a) 90'000      (b) 65'000  
 (c) 60,000      (d) 1,00,000

**Answer: b**

**Explanation:**

Total cost = 1, 25, 000

Implicit cost = 35,000

Normal profit = 25000

Explicit cost = ?

Total cost = Explicit cost + Implicit cost + Normal profit

1, 25000 = Explicit cost + 35000 + 25000

Explicit cost = 65000

**Question 13**

**What is the total of production of 20 units if fixed cost Rs. 5,000 and variables Cost is 2/-?**

- (a) 5, 400 (b) 4, 980  
(c) 5, 040 (d) 5' 020

**Answer: c**

**Explanation:**

Total Cost = Fixed + Variable cost

$$5'000 + 20 \times 2 = Tc$$

$$5, 040 = Tc$$

**Question 14**

**External economics accrue due to\_\_**

- (a) Increasing returns to scale (b) Increasing returns to factor  
(c) Law of variable proportion (d) Low cost

**Answer: a**

**Explanation:**

External economics accrue to firms as a result of expansion of output of whole industry increasing returns to scale accrues due to external economics.

**Question 15**

**At which point does the marginal cost intersect the average variable cost curve and short run average total cost curve?**

- (a) At equilibrium point (b) At their lowest point  
(c) At their optimum point (d) They don't intersect at all

**Answer: b**

**Explanation:**

Marginal cost curve and average cost curve have a tendency that when AC curve falls, MC curve falls faster AV curve rises MC curve rises on a faster rate and MC curve cuts the AC curve at its minimum (lowest point).

**Question 16**

**As output increases, opportunity cost:-**

- (a) Remains constant (b) Start rising  
(c) Starts falling (d) None

**Answer: b**

**Explanation:**

As you increase the production of one good, the opportunity cost to produce the additional good will increase.

**Question 17**

**Outlay cost involves:-**

- (a) Nominal Expenditure (b) Fixed Expenditure  
(c) Actual expenditure (d) None

**Answer: c****Explanation:**

Outlay costs involve actual expenditure of funds on say wages, materials, rent, interest, etc.

**Question 18**

**Cost which are already incurred once and for all and cannot be recovered:-**

- (a) Non- Traceable costs (b) Sunk cost  
(c) Opportunity costs (d) None

**Answer: b****Explanation:**

Sunk costs refer to those costs which are already incurred once and for all and cannot be recovered.

**Question 19**

**Rent, property taxes, interest on loans and depreciation is example of which cost.**

- (a) Fixed (b) Variable  
(c) Opportunity (d) None

**Answer: a****Explanation:**

Fixed or constant costs are not a function of output they do not vary with output up to a certain level of activity. These costs require a fixed expenditure of funds irrespective of the level of output, e.g. Rent, property taxes, interest on loans and depreciation.

**Question 20**

**Increase in scale, beyond the optimum level, result in**

- (a) Diseconomies of scale (b) Economics of scale  
(c) Can't say (d) None

**Answer: a****Explanation:**

Increase in scale, beyond the optimum level result in diseconomies of scale.

**Question 21**



**If a firm moves on point on a production isoquant to another, which of the following will not happen.**

- (a) A change in the ratio in which the inputs Are combined to produce outputs  
 (b) A change in the ratio of marginal products of the inputs  
 (c) A change in the marginal rate of technical substitution  
 (d) A change in the level of outputs

**Answer: d**

**Explanation:**

If a firm moves from one point on a production isoquant to another there is no change in the level of output.

**Question 22**

**Marginal cost change due to changes in -----**

- (a) Total Cost  
 (b) Average Cost  
 (c) Variable Cost  
 (d) Quantity of output

**Answer: c**

**Explanation:**

Marginal cost changes due to changes in Variable cost

**Question 23**

**Economics costs of production differ from accounting costs of production because**

- (a) Economic costs include expenditure For hired resources while accounting Cost do not  
 (b) Accounting costs in includes opportunity costs which are deducted later to find paid out cost.  
 (c) Accounting cost include expenditure For hired resources while economic Costs don't.  
 (d) Economic cost adds the opportunity cost of a firm which uses its own resources.

**Answer: d**

**Explanation:**

Economic cost of production differs from accounting costs of production because Economic costs add the opportunity cost of a firm which uses its own resources

**Question 24**

**The average product of labor is maximized of Labor when marginal product of labor:**

- (a) Equals the average product of labor  
 (b) Equals zero.  
 (c) Is maximized  
 (d) None of the above

**Answer: a**

**Explanation:**

The average product of labor is maximized when marginal product of labor equals the average product of labor

**Question 25**

**Implicit can be defined as:-**

- |   |  |
|---|--|
| <p>(a) Money payments made to the non-owners of the firm for the self-owned factor employed in the business and therefore not entered into books of accounts.</p>             | <p>( b) Money not paid out to the owners of the firm for the self-owned factor employed in a Business and therefore not entered into Books of account.</p> |
| <p>(c) Money payment which the self-owned and employed resources could have earned in their next best alternative employment and therefore entered into books of accounts</p> | <p>(d) Money payment which the self-owned and employed resources earn their best use and therefore, entered into book of accounts.</p>                     |

**Answer: b**

**Explanation:**

Money not paid out to the owners of the firms for the self-owned factors employed in a business and therefore not entered into books of accounts is known as implicit cost.

**Question 26**

**Which function refers to the mathematical relation between cost of a product and the various determinate?**

- |                 |                              |
|-----------------|------------------------------|
| <p>(a) Cost</p> | <p>(b) Income</p>            |
| <p>(c) Both</p> | <p>(d) None of the above</p> |

**Answer: a**

**Explanation:**

Cost function refers to the mathematical relation between costs of a product and the various determinates.

## Past Examination Question

### MAY - 2018

#### Question 1

**Cobb Douglas function is given by  $Q = K L^a C^b$**

- (a) If  $\alpha + \beta > 1$ , increasing returns to scale      (b) If  $\alpha + \beta > 1$ , increasing returns to scale  
 (c) If  $\alpha + \beta > 1$ , diminishing returns to scale      (d) If  $\alpha + \beta = 1$ , decreasing returns to scale

**Answer: b**

**Explanation:**

Cobb – Douglas function is given by Paul H. Douglas and C.W. Cobb of “U.S.A Studied the production of American Manufacturing industries they describe that output is manufacturing and inputs are labor and capital. It is manufacturing and input are labor and capital. It is given by  $Q = K L^a C^{(1-a)}$  IF,  $a = 1$ , Increasing returns to scale.

#### Question 2

**Production is defined as:**

- (a) Creation of matter      (b) Creation of utility in matter  
 (c) Creation of infrastructural facilities      (d) None of these

**Answer: a**

**Explanation:**

Man cannot create matter: Man can create only utility in matter: production should not be taken as creation of matter but it is taken as creation.

#### Question 3

**The conclusion drawn from Cobb Douglas production function is that labor contributed about    and    of the increase in the manufacturing production**

- (a)  $\frac{3}{4}$ ,  $\frac{1}{4}$       (b)  $\frac{1}{2}$ ,  $\frac{1}{2}$   
 (c)  $\frac{1}{4}$ ,  $\frac{3}{4}$       (d) None of these

**Answer: a**

**Explanation:**

**As Cobb Douglas Function is given below:**

$$Q = K L^a C^{(1-a)}$$

Which shows that labor produces  $\frac{3}{4}$  th and capital produces  $\frac{1}{4}$  of the increase in manufacturing production.

#### Question 4

**At point of inflexion the marginal product is:**

- (a) Increasing  
(c) Maximum
- (b) Decreasing  
(d) Revenue lines

**Answer: c**

**Explanation:**

Point of inflexion is a point where marginal is at maximum first marginal product utility increase then reach at maximum which is point of inflexion and then decrease. Marginal product is negative.

### **Question 5**

**Isoquant`s are equal to:**

- (a) Product lines  
(c) Total utility lines
- (b) Cost lines  
(d) Revenue lines

**Answer: a**

**Explanation:**

Isoquants are similar to indifference curve of theory of consumer behavior. An isoquants Represents all that combination which is capable of producing same level of output Product indifference curve is another name of isoquants as it represents product lines.

### **Question 6**

**Increasing returns to scale can be explained in terms of:**

- (a) External and internal economics  
(c) External economics and internal diseconomies
- (b) External and internal diseconomies  
(d) All of these

**Answer: a**

**Explanation:**

Increasing returns to scale means increase in output is greater than Increase in inputs and Increasing returns to scale cause due to external and internal economies while decreasing returns to scale causes due to external and internal diseconomies.

### **Question 7**

**The stages “ law of diminishing returns “ are:**

- (a) Increasing Returns  
(c) Both a & b
- (b) Diminishing Returns  
(d) None of these

**Answer: c**

**Explanation:**

The stages of diminishing returns:-

Stage 1: Increasing returns.

Stage 2: Diminishing returns.

Stage 3: Negative returns.

**Question 8****Linear homogenous production function is based on:-**

- (a) Increasing returns to scale                      (b) Decreasing returns to scale  
 (c) Constant returns to scale                      (d) None of the above

**Answer: c****Explanation:**

Linear homogenous production is based on constant return to scale because output increase in the same way as increase in input or we can say that increase in output is equal to increase in inputs sole proprietorship production is based on constant to Sale for lifetime.

**Question 9****Which of the following curve is not U shaped?**

- (a) AFC    (b) MC  
 (c) AVG    (d) TC

**Answer: a****Explanation:**

AFC is the cost obtained total fixed cost by the number of units of output.

$$AFC = \frac{TFC \text{ (Total Fixed Cost)}}{Q \text{ (NO. of units of output)}}$$

TFC can never be u- shaped as it will fall as total output increases and will not touch the X- axis it can also never be zero.

**Question 10**

Unit	0	1	2
TC	580	1200	1500

**Calculated AFC at 2<sup>nd</sup> unit of output**

- (a) 235    (b) 290  
 (c) 310    (d) 920

**Answer: b****Explanation:**

Here: 580 is a fixed cost because it will be incurred whether firm produces or not so, it is fixed cost,

We know

$$AFC = TFC/Q$$

$$AFC = ?, TFC = 580, Q = 2$$

So,

$$AFC = 580/2 = 290$$

**Question 11****Which of the following curves never touch any axis but is downward?**

- (a) Marginal cost curve                              (b) Total cost curve

(c) Average fixed cost curve

(d) Average variable cost curve

**Answer: c****Explanation:**

Average fixed cost is a curve cannot touch any axis so, it can never be zero when total Production increases then average fixed cost steadily falls but never touch axis

**Question 12****External economies accrue due to - \_\_**

(a) Increasing returns to scale

(b) Increasing returns to factor

(c) Law of variable proportions

(d) Low cost

**Answer: a****Explanation:**

Increase returns to scale means when there is a increase in output is more than Increase in input or in other words increase in output is less than increase in input and there Are some factor or external economics which tends to increasing returns to scale.

**Question 13****A firm's average fixed cost is 20 at 6 units of output what will be at 3 units of outputs?**

(a) 60

(b) - 30

(c) 40

(d) 20

**Answer: c****Explanation:**

Average fixed cost is 20 at 6 units and what will be at 3 units?

$$AFC = \frac{fc}{Q}$$

$$20 = \frac{fc}{6} = 120$$

$$\frac{120}{3}$$

$$= 40$$

**Question 14****Which of the following is correct?**(a)  $AFC = AVC = ATC$ (b)  $ATC = AFC - AVC$ (c)  $VC = AFC + ATC$ (d)  $AFC = ATC - AVC$ **Answer: d****Explanation:****Average fixed can be obtained in two ways:**

$AFC = \frac{TFC}{Q}$  total Fixed Cost

Q No. of units of output

$AFC = ATC - AVC$

Where, ATC = Average total cost and AVC= Average variable cost.  
When two goods are perfect complementary goods, the indifference curve will consist of two straight lines with a right angle bent which is convex to the origin or in other words, it will be L shaped.

### **Question 15**

**The cost of one thing in terms of alternative given up:-**

- |                      |                     |
|----------------------|---------------------|
| (a) Real cost        | (b) Production cost |
| (c) Opportunity cost | (d) Physical cost   |

**Answer: c**

**Explanation:**

Opportunity cost is the cost which means the next best activity sacrificing of one good thing for other.

### **Question 16**

**The cost which remains fixed over certain range of output but suddenly jumps to a new higher level when production goes beyond a given are called:**

- |                                |                          |
|--------------------------------|--------------------------|
| (a) Variable cost              | (b) Semi – variable cost |
| (c) Stair – step variable cost | (d) Jumping cost         |

**Answer: c**

**Explanation:**

**There are so many types of variable cost and these are:**

- ❖ Variable cost or pure Variable Cost
- ❖ Semi – variable or mixture of fixed and variable cost
- ❖ Stair – step variable cost which means the cost which remain fixed for a long time but suddenly jumped to a new higher level when production goes beyond a given limit.

## **NOV - 2018**

### **Question 1**

**According to the Cobb Douglas production function will get\_\_ return to scale:-**

- |                |                      |
|----------------|----------------------|
| (a) Constant   | (b) Diminishing      |
| (c) Increasing | (d) Any of the above |

**Answer: a**

**Explanation:**

As Cobb – Douglas function is given below.

$$Q = K L^a C^{(1-a)}$$

When 'Q' is output, 'L' is the quantity of labor and 'C' the quantity of capital. 'K' and 'a' are positive constants.

**Question 2**

**Which of the following statement about factors of production is not true?**

- (a) Land is a passive factor  
 (b) Land is a free gift of nature  
 (c) Land is immobile  
 (d) Land is perishable

**Answer: d**

**Explanation:**

**Characteristics of land are:**

- ❖ Land is a free gift of nature
- ❖ Supply of land is fixed
- ❖ Land is permanent and has indestructible power
- ❖ Passive factor
- ❖ Land in Immobile

Therefore, land is not perishable and (d) option will be the answer.

**Question 3**

**The slope of Average fixed cost curve is?**

- (a) Falls from left to right  
 (b) Rises from left right  
 (c) Parallel to x - axis  
 (d) Parallel to y - axis

**Answer: a**

**Explanation:**

Shape of Average fixed Cost is hyperbola in shape it falls from left to right but does not touch x axis.

**Question 4**

**Price of a commodity is best expressed as:-**

- (a) Exchange value  
 (b) Cost of goods sold  
 (c) Parallel to x- axis  
 (d) Parallel to y - axis

**Answer: a**

**Explanation:**

Price of commodity is expressed as its exchange value as it is the price at which it will be sold or purchased

**Question 5**

**Accounting cost is \_\_\_ Economics cost.**

- (a) Equal to  
 (b) less than  
 (c) More than  
 (d) Not included

**Answer: b**

**Explanation:**

Accounting cost is explicit cost and economic cost is Explicit Cost + National cost therefore, accounting cost is less than economics cost.

**Question 6**



**When AC Curve is at minimum then MC Curve is\_\_?**

- (a) Minimum then AC Curve (b) Equals to AC Curve  
(c) Above AC Curve (d) Less than AC Curve

**Answer: b**

**Explanation:**

When average cost is minimum, MC is equal to the AC in other word MC curve cuts AC curve at its minimum point.

**Question 7**

**Which of the following equation represents profit maximization condition?**

- (a)  $MC = MR$  (b) Equals to AC Curve  
(c) Above AC Curve (d) Less than AC Curve

**Answer: a**

**Explanation:**

Profit will be at maximum level when marginal revenue is equal to marginal cost therefore it is able to cover its cost and survive in economy.

**Question 8**

**MC curve of a firm in a perfectly competitive industry depicts?**

- (a) Demand curve (b) Supply curve  
(c) Average cost curve (d) Total cost curve

**Answer: b**

**Explanation:**

MC curve is rising upward in a competitive market therefore, it depicts supply curve

**Question 9**

**Issues requiring decision making in the context of business are:**

- (a) How much should be the optimum Output at what price should the firm sell (b) How will the product be placed in the Market?  
(c) How to combat the risks at Uncertainties Involved? (d) All of the above

**Answer: d**

**Explanation:**

The entire given are required for making business decision in context of business therefore Answer will be (d) all of the above.

**Question 10**

**Law of production does not include?**

- (a) Returns to scale (b) Law of variable proportion  
(c) Law of diminishing returns to a factor (d) least cost combination factors

**Answer: d**

**Explanation:**

Least cost combination factor is not included in law of production function.

## MAY - 2019

### Question 1

**Which of the following statement about factors of production is not true?**

- (a) Land is a passive factor  
(b) Land is a free gift of nature  
(c) Land is immobile  
(d) Land is perishable

**Answer: d**

**Explanation:**

Land is perishable statement about factor of production is not true.

### Question 2

**Accounting cost will be .....economic cost.**

- (a) Greater than  
(b) less than  
(c) Equal to  
(d) None of these

**Answer: b**

**Explanation:**

Accounting cost will be less than economics cost.

### Question 3

**Cobb - Douglas production function represents.....returns to scale.**

- (a) Constant  
(b) Increase  
(c) Decrease  
(d) None of these

**Answer: a**

**Explanation:**

Cobb - Douglas production function represents constant to scale.

### Question 4

**If Average cost of s firm is minimum, then Marginal cost will be.....**

- (a) Greater than average cost  
(b) Equal to average cost  
(c) Less than average cost  
(d) None one of these

**Answer: b**

**Explanation:**

If Average coat of a firm is minimum, then marginal cost will be equal to average cost.

### Question 5

**Marginal Cost curve is :-**

- (a) Downward sloping  
(b) Upward sloping  
(c) Straight line  
(d) None of these

**Answer: b**

**Explanation:**

The marginal cost curve is upward-sloping, because diminishing marginal returns implies that additional units are more costly to produce.

**Question 6**

**On the basis of law of variable proportion, average product is at its maximum, when average product is..... marginal product.**

- (a) Greater than (b) Less than  
(c) Equal to (d) None of these

**Answer: c**

**Explanation:**

On the basis of law of variable proportion average product is at its maximum when average product is equal to marginal product

**Question 7**

**The relation of price of a commodity with its demand is:**

- (a) Direct (b) Negative  
(c) Inverse (d) None of these

**Answer: c**

**Explanation:**

The law of demand—the inverse relationship between prices and quantity demanded.

## DEC - 2020

**Question 1**

**Use the table and answer for the following questions**

Output	0	1	2	3	4	5	6
Total Cost in Rs.	100	180	250	310	360	420	490

**The average fixed cost of 4 units of output is**

- (a) 80 (b) 90  
(c) 25 (d) 350

**Answer: c**

**Explanation:**

$$AFC = \frac{\text{Total Fixed Cost}}{\text{Output (Q)}} = \frac{100}{4} = 25$$

**Question 35**

**The average variable cost of 5 units of output**

- (a) 84 (b) 64  
(c) 420 (d) 104

**Answer: b**

**Explanation:**

$$\frac{420 - 100}{5} = 64$$

**Question 2**

**The marginal cost of 5th unit of output is**

- |         |        |
|---------|--------|
| (a) 60  | (b) 70 |
| (c) 540 | (d) 90 |

**Answer: a**

**Explanation:**

$$420 - 360 = 60$$

**Question 3**

**The total cost is Rs.4200 and fixed cost is Rs.1200 then find the variable cost**

- |          |          |
|----------|----------|
| (a) 5450 | (b) 1200 |
| (c) 4200 | (d) 3000 |

**Answer: d**

**Explanation:**

$$\begin{aligned} \text{Variable cost} &= \text{Total cost} - \text{Fixed Cost} \\ &= 4200 - 1200 = 3000 \end{aligned}$$

**Question 4**

**When output increases more than the increase in input, it occurs due to**

- |  |  |
|--|--|
| (a) External and internal diseconomies           | (b) External and internal economies              |
| (c) External diseconomies and internal economies | (d) External economies and internal diseconomies |

**Answer: b**

**Explanation:**

When output increases more than the increase in input, it occurs due to external and internal economies

**Question 5**

**A functional relationship between inputs and output is called \_\_\_\_**

- |                          |                         |
|--------------------------|-------------------------|
| (a) Cost function        | (b) Revenue function    |
| (c) Consumption function | (d) Production function |

**Answer: d**

**Explanation:**

The production function is a technical relationship between the amount of inputs that a firm uses and the maximum level of output that can be obtained. As such, it is not based on any important behavioral assumption imposed on producers.

**Question 6**

**Among the following statements which is incorrect in relation to isoquant**

- (a) Isoquant are negatively sloped      (b) Isoquant are concave to origin  
(c) Isoquant are not intersecting      (d) Isoquant are convex to origin

**Answer: b**

**Explanation:**

**Characteristics of Isoquants**

- The slope of an isoquant is convex in nature and this follows directly from the assumption of diminishing marginal rate of substitution. This implies that lesser is amount of the factor is used by the firm, the lesser willing it is to give up a unit of that factor to obtain an additional unit of the other factor. The opportunity cost of each extra unit is increasing.
- Isoquants can never cross each other as this will violate the fundamental rule that a higher isoquant yield higher utility. Isoquants that cross each other imply that isoquant of different levels are capable of providing the same satisfaction at a point. This however is not possible.
- The isoquant has a negative slope in order to imply that resources are scarce and in order to employ more of a particular resource the employer must employ less of the other factor.

**Question 7**

**External economies can be achieved through:**

- (a) Technological external economies      (b) External assistance  
(c) Development of unskilled labor      (d) Superior managerial efficiency

**Answer: a**

**Explanation:**

External economies of scale occur when a whole industry grows larger and firms benefit from lower long-run average costs. External economies of scale can also be referred to as positive external benefits of industrial expansion.

**Question 8**

**Marginal product will be \_\_\_\_ at the point of inflexion is**

- (a) Maximum      (b) Minimum  
(c) Negative      (d) Zero

**Answer: a**

**Explanation:**

Maximum after the product decreases to point of inflexion.

**Question 43**

**The concept of “ innovative entrepreneurship” was given by**

- (a) Marshall      (b) Schumpeter

(c) J K Mehta

(d) Adam smith

**Answer: b****Explanation:**

The innovative theory is one of the most famous theories of entrepreneurship used all around the world. The theory was advanced by one famous scholar, Schumpeter, in 1991.

**Question 9****Which activity is the base of all production activities :**

(a) Production

(b) Exchange

(c) Investment

(d) Consumption

**Answer:c****Explanation:**

Investment activity is the base of all activities.

**JAN - 2021****Unit: 1Production****Question 1****Production may be defined as an act of\_\_\_\_\_**

(a) Creating utility

(b) Destroying

(c) Earning profit in best way

(d) Providing services professionally

**Answer: a****Explanation:**

Production is the act of creating an output, a good or service which has value and contributes to the utility of individuals.

**Production Analysis****Question 2****Which of the following is correct in relation to Marginal product?**

(a) What is produced units when all Factors of production are employed at Optimum efficiency

(b) The extra output obtained from employing an additional unit of a factor

(c) The left revenue to the entrepreneur

(d) None of the above

after he has incurred all expenses

**Answer: b****Explanation:**

The marginal product or of an input (factor of production) is the change in output resulting from employing one more unit of a particular input.

**Question 3**

**According to cob-Douglas production function, labour contribution in increasing manufacturing production is**

- (a)  $2/3$  (b)  $3/4$   
(c)  $1/4$  (d)  $1/2$

**Answer: b**

**Explanation:**

The production function solved by Cobb-Douglas had  $1/4$  contribution of capital to the increase in manufacturing industry and  $3/4$  of labour.

**Question 4**

**When Average product fails, marginal product is \_\_\_\_\_ the Average product.**

- (a) Less than (b) More than  
(c) Equal to (d) Maximum

**Answer: a**

**Explanation:**

Marginal product (MP) pulls the average product (AP) up or down. So, AP falls when MP is less than AP.

**Question 5**

**How many kinds are of Economies of scale?**

- (a) 5 (b) 3  
(c) 2 (d) 1

**Answer: c**

**Explanation:**

There are two different types of economies of scale. Internal economies are borne from within the company. External ones are based on external factors. Internal economies of scale happen when a company cuts costs internally, so they're unique to that particular firm.

**Question 6**

**In short run, type of law of variable proportions is also known as**

- (a) Law of increasing returns (b) Law of diminishing returns  
(c) Law of decreasing return (d) Law of constant return

**Answer: b**

**Explanation:**

In the short run, the law of variable proportions states that as we add more units of a variable input to fixed amounts of land and capital, the change in total output will at first rise and then fall. It is also known as Law of variable proportion.

**Question 7**

**The law of returns to scale is:**

- (a) Short run (b) Long run

(c) Short and long run

(d) Medium run

**Answer: b****Explanation:**

In the long run, output can be increased by increasing all factors in the same proportion. Generally, laws of returns to scale refer to an increase in output due to increase in all factors in the same proportion. Such an increase is called returns to scale.

**Unit: 2 Theory of Cost****Question 8**

**A firm producing 7 units of output has an average total cost of Rs. 150 and has to pay Rs. 350 to its fixed factors of production whether it produces or not? How much of the average total cost is made up of variable costs?**

(a) 200

(b) 50

(c) 300

(d) 100

**Answer: d****Explanation:**

TC = 150

FC = 350

TC is less than fc.

**Question 9**

**A firm has a variable cost of Rs. 2,000 at 5 units of output. If fixed costs are Rs. 800, what will be the average total cost at 5 units of output?**

(a) 560

(b) 120

(c) 240

(d) 2,800

**Answer: a****Explanation:**

$$\frac{2000+800}{5} = 560$$

**Question 10**

**Which of the following statements is false?**

(a) Economics costs include the opportunity costs of the resources owned by the firm

(b) Accounting costs include only explicit costs

(c) Economic profit will always less than accounting profit if resources owned and used by the firm have any opportunity costs

(d) Accounting profit is equal to total revenue less implicit costs

**Answer: d**



**Explanation:**

Accounting profit includes explicit costs, such as raw materials and wages. Economic profit includes explicit and implicit costs, which are implied or imputed costs.

**Question 11**

**Average cost curve is**

- (a) 'U' shaped (b) Positively sloped  
(c) Negatively sloped (d) Rectangular hyperbola

**Answer: a**

**Explanation:**

Average cost curves are typically U-shaped, Average total cost starts off relatively high, because at low levels of output total costs are dominated by the fixed cost.

## **JULY - 2021**

**Question 1**

**Which one of the following is not a necessary function of an entrepreneur?**

- (a) Risk and uncertainty bearing. (b) Initiating a business enterprise.  
(c) Innovations. (d) Supervision of day-to-day production activities.

**Answer: d**

**Explanation:**

While, an entrepreneur needs to be innovative while planning and deciding upon business activities as to fulfill the public demand but, it is not his duty to innovate new technology or products. Thus, innovation is not a function to be performed rather an essential characteristic of a successful entrepreneur.

**Question 2**

**Which of the following is not a passive factor of production?**

- (a) Land (b) Building  
(c) Labour (d) Machine

**Answer: c**

**Explanation:**

- Land itself does not produce anything alone. It is a passive factor of production. It needs help of labour, capital, entrepreneur, etc., in order to obtain yields from it.
- Capital is also a passive factor of production. This is so because it becomes ineffective without co-operation of labour.

**Unit: 2 Theory of Cost**

**Question 1**

**Zero economic profit emerges due to which of the following condition**

- (a) MR is just equal to ATC  
 (b) AR is just equal to MC  
 (c) MR is just equal to MC  
 (d) AR is just equal to AC

**Answer: d**

**Explanation:**

In economic competition theory, the zero-profit condition is the condition that occurs when an industry or type of business has an extremely low (near-zero) cost of entry to or exit from the industry.

**Question 2**

**The difference between TFC and TC is equal to**

- (a) Zero  
 (b) TVC  
 (c) MC  
 (d) AFC

**Answer: b**

**Explanation:**

The TC curve is inverted-S shaped. This is because of the TVC curve. Since the TFC curve is horizontal, the difference between the TC and TVC curve is the same at each level of output and equals TFC. ... The TFC curve is parallel to the horizontal axis while the TVC curve is inverted-S shaped.

Thus, the difference between TVC and TC is equal to the amount of TFC. The law of variable proportion explains the change in output when one factor is kept.

**Question 3**

**Use table below to answer questions 20-22**

Output	0	1	2	3	4	5	6
Total Cost	360	495	615	720	810	915	1035

**The average fixed cost of 3 units of output is**

- (a) 1180  
 (b) 1225  
 (c) 1120  
 (d) 1134

**Answer: (c)**

**Explanation:**

$$AFC = \frac{FC}{Q}$$

**Question 4**

**The marginal cost of the 5<sup>th</sup> output is**

- (a) 1174  
 (b) 1225  
 (c) 1675  
 (d) 1105

**Answer: d**

**Explanation:**

Marginal Cost = (Change in Costs) / (Change in Quantity)

**Question 5**

Diminishing marginal returns starts to occurs between \_\_ units

- (a) 4 to 5 (b) 3 to 4  
(c) 5 to 6 (d) 1 to 2

**Answer: a****Explanation:**

Diminishing marginal returns starts to occurs between 4 to 5 units

**DEC - 2021****Question 1**

Marginal revenue have \_ slope and Marginal cost have \_ slope

- (a) Downward, upward (b) Downward, Downward  
(c) upward ,downward (d) upward, upward

**Answer: a****Explanation:**

Downward, upward: If MC sloped downward (which can happen, if the firm has economies of scale) and MR sloped upward (which would be unusual, but can happen for some demand functions), the point of intersection would be a profit-minimizing point.

**Question 2**

Average revenue also known as -

- (a) Mid Revenue (b) Total revenue  
(c) class revenue (d) demand revenue

**Answer: d****Explanation:**

The average revenue formula is simple. This is essentially the revenue that is earned for each unit of the output. In other words, it's the price of 1 unit of output. The expression for the average revenue is as follows:  $AR=TR/Q$

**JUNE - 2022****Unit :1 Theory of production****Question 1**

Land is heterogeneous because of:

- (a) Lands are alike (b) Lands are not alike  
(c) Lands are fixed (d) Lands are mobile

**Answer: b**

**Explanation:**

Land is heterogeneous because no two lands are alike they differ in size, fertility and situation.

Land is a free gift of nature, fixed in supply, passive, and immobile.

**Question 2**

**When TP is decreasing, MP becomes?**

- |               |              |
|---------------|--------------|
| (a) Positive  | (b) Zero     |
| (c) Undefined | (d) Negative |

**Answer: d**

**Explanation:**

When TP is increasing, MP is increasing, MP is when zero, TP is maximum, when- MP is negative and average revenue is diminishing, TP is decreasing/diminishing.

**Question 3**

**Profit is an income from:**

- |              |                |
|--------------|----------------|
| (a) Land     | (b) Investment |
| (c) Business | (d) Labor      |

**Answer: c**

**Explanation:**

Profit is an income from business.

Profit is the revenue that remains after expenses in a business.

The main aim of business is the acquisition of profits.

**Question 4**

**If the output has to max then:**

- |               |               |
|---------------|---------------|
| (a) $MR < MC$ | (b) $MR = MC$ |
| (c) $MR > MC$ | (d) $MR > MC$ |

**Answer: b**

**Explanation:**

If the output is to be maximum level then the Marginal revenue should be equal Marginal cost.

When MR, MC, a firm has maximum output produced with additional products/ outputs for maximum revenue.

**Question 5**

**Marginal cost changes due to change in \_\_\_\_\_ cost.**

- |             |              |
|-------------|--------------|
| (a) Total   | (b) Fixed    |
| (c) Average | (d) Variable |

**Answer:**

**Explanation:**

Marginal cost is the addition made to the total cost by the production of an additional unit of output. It is independent of fixed cost. It is only the variable cost which changes with a change in the level of output in a short run.

### **Question 6**

**Which cost increases continuously with the increase in production?**

- (a) Fixed cost (b) Variable cost  
(c) Total Cost (d) Average cost

**Answer:**

**Explanation:**

Variable cost increases as production increases as every additional unit of output increases the variable cost.

Fixed cost remains the same.

### **Question 7**

**The market where small quantities of goods sold**

- (a) Wholesale (b) Retail  
(c) Manufactures (d) None of the above

**Answer: b**

**Explanation:**

The market where the small quantities of goods sold are retail markets.

### **Question 8**

**The Law of variable proportion is associated with.**

- (a) Short Period (b) Long Period  
(c) Both Short & Long Periods (d) Neither Short nor Long Period

**Answer:**

**Explanation:**

Law of variable proportion is applicable to short run period. Law of variable proportion exhibits the relationship between the changes of output in respect do the change in only one variable factor, only in short run economy.

## **Unit: 2 Theory of Cost**

### **Question 9**

**Total economic cost = implicit cost + explicit cost**

- (a) Normal Profit (b) Abnormal cost  
(c) Economic Profit (d) None of the above

**Answer:**

**Explanation:**

Total Economic cost = Implicit Cost+ Explicit Cost + Normal Cost

**DEC - 2022****Question 1**

A firm producing 7 units of output has an average total cost of rupees 150 and has to pay rupees 350 to its fixed factors of production whether it produces or not. How much of the average total cost is made up of variable costs?

- a) 100
- b) 200
- c) 50
- d) 3000

**Answer: a**

**Explanation**

ATC at 7 units = 150

AFC at 7 units =  $\frac{350}{7} = 50$

ATC = AFC + AVC

ATC - AFC = AVC

150 - 50 = AVC

AVC = 100 at 7 units of output.

**Question 2**

**Total Profits are maximized when**

- a) TR equals TC
- b) The TR curve and the TC curve are parallel
- c) TC exceed TR
- d) TR exceeds TC

**Answer: c**

**Explanation**

Profit will be maximized when total revenue (TR) exceeds total cost (TC) by the greatest amount. This is also the point when the additional revenue of producing one more unit is equal to the additional cost of producing one more unit and the additional cost is increasing.

**Question 3**

**The marginal product of a variable input is described as**

- a) The additional output resulting from one unit increase in both the variable and fixed inputs
- b) The additional output resulting from one unit increase in fixed inputs
- c) The additional output resulting from one unit increase in the variable inputs
- d) The additional output resulting from one unit increase in variable inputs

**Answer: c**

**Explanation**

The marginal product or marginal physical productivity of an input is the change in output resulting from employing one more unit of a particular input, assuming that the quantities of other inputs are kept constant.

**Question 4****In the long run**

- |              |                     |
|--------------|---------------------|
| a) $AC = AR$ | b) $LMC = LAC = P$  |
| c) $MC = MR$ | d) all of the above |

**Answer: d****Explanation**

Equilibrium point is judged in long run when there is / are following condition given:

- Marginal Cost = Marginal Revenue or  $MC = MR$
- Average Cost = Average Revenue or  $AC = AR$
- Long run Marginal Cost = Long run Average Cost = Price or  $LMC = LAC = P$

**Question 5****Change of scale occurs in:**

- |              |             |
|--------------|-------------|
| a) Short run | b) long run |
| c) Both      | d) none     |

**Answer: b****Explanation**

In economics, returns to scale describe what happens to long-run returns as the scale of production increases, when all input levels including physical capital usage are variable (able to be set by the firm).

**Question 6****When  $MC=MR$** 

- |  |                        |
|--|------------------------|
| a) a firm is in loss                             | b) a firm is in profit |
| c) a firm is earning<br>maximizing its<br>profit | d) none of the above   |

**Answer: c****Explanation**

Maximum profit is the level of output where  $MC$  equals  $MR$ .

Thus, the firm will not produce that unit. Profit is maximized at the level of output where the cost of producing an additional unit of output ( $MC$ ) equals the revenue that would be received from that additional unit of output ( $MR$ ).

**Question 7****In stage 1  $TR$  is increasing at a decreasing rate due to:**

- |                         |                                |
|-------------------------|--------------------------------|
| a) Diminishing marginal | b) increasing marginal revenue |
|-------------------------|--------------------------------|

- revenue  
c) diminishing marginal utility  
d) all of the above

**Answer: a**

**Explanation**

The slope of total revenue is determined by the marginal revenue

**Question 8**

**Economic costs includes:**

- a) implicit and explicit costs  
b) accounting cost  
c) implicit - explicit costs  
d) none of the above

**Answer: a**

**Explanation**

Economic costs include both implicit costs and explicit costs. Implicit costs are the opportunity cost of engaging in business activity. Its is the return forgone by using the owned resource in productive activity.

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