58/1/1

Q.No.	Expected Answer / Value Points	Marks Distribution
	SECTION A – MICRO ECONOMICS	
1	$(P_1)(X_1) + (P_2)(X_2) = M$ OR Marginal utility (MU): MU can be defined as the addition to the total utility (TU) by consuming one extra unit of the commodity.	**1** **1**
2	(c) Utils	**1**
3	Opportunity cost	**1**
4	Leftward Shift in demand curve: (i) Fall in the price of substitute goods (ii) Rise in the price of Complementary goods (iii) Decrease in the size of population (iv) Unfavourable Change in taste (v) Fall in income of the consumer (in case of normal goods) **(any one valid reason)** OR Price Elasticity of Demand is defined as the degree of responsiveness of change in quantity demanded for a good due to a change in its price.	**1** **1**
5	Marginal Rate of transformation (MRT) increases as we move along the Production Possibility Curve (PPC) from left to right. MRT increases because it is based on the assumption that resources are not equally efficient in production of both the goods. Thus, when resources are transferred from one use (Good Y) to another (Good X), more and more units of Good Y are to be sacrificed to produce an additional unit of Good X. **(to be marked as a whole)**	**3**
6	As output increases, Average fixed Cost (AFC) curve decreases continuously but never touches to any axis. It is because, when total fixed cost is divided by incremental units of output, the resultant AFC curve falls and takes the shape of a rectangular hyperbola. **(to be marked as a whole)** OR Average Variable Cost (AVC) curve is U-shaped due to the application of law of variable proportions. Initially, Average Variable Cost (AVC) curve falls due to increasing returns to a factor with better utilisation of fixed and variable factors. After reaching its minimum level (optimum level of output), AVC starts increasing with every increase in output due to diminishing returns to a factor. **(to be marked as a whole)**	**3** 1 2
7	The given statement is true. Under Perfect Competition the equilibrium price is determined by the industry through the market forces of demand and supply. This price is to be accepted by the all individual firms which have negligible share in the total market output and cannot influence the market price. Thus, the firms under perfect competition are a price taker and industry is the price maker. **(no marks to be allotted if the reason is not given or wrongly given)**	4
8	(a) The given statement is false. The quantity of a good that a consumer demands can increase or decrease with rise in income. This depends upon the nature of the good i.e. normal good or an inferior good. With increase in income of an individual, the demand for normal good	2

rises whereas demand for inferior good falls.

(b) The given statement is false. The demand curve in this situation will be downward sloping from left to right due to inverse relationship between price and its quantity demanded.

(no marks to be allotted if the reason is not given or wrongly given) 2

OR

$$E_d = \frac{Percentage\ \ change\ \ in\ quantity\ \ demanded}{Percentage\ \ Change\ \ in\ price}$$ (ignoring minus sign)

$$= \frac{100\%}{20\%}$$ 1

$= 5$ 1

Shape of demand curve is downward sloping from left to right. 1

1

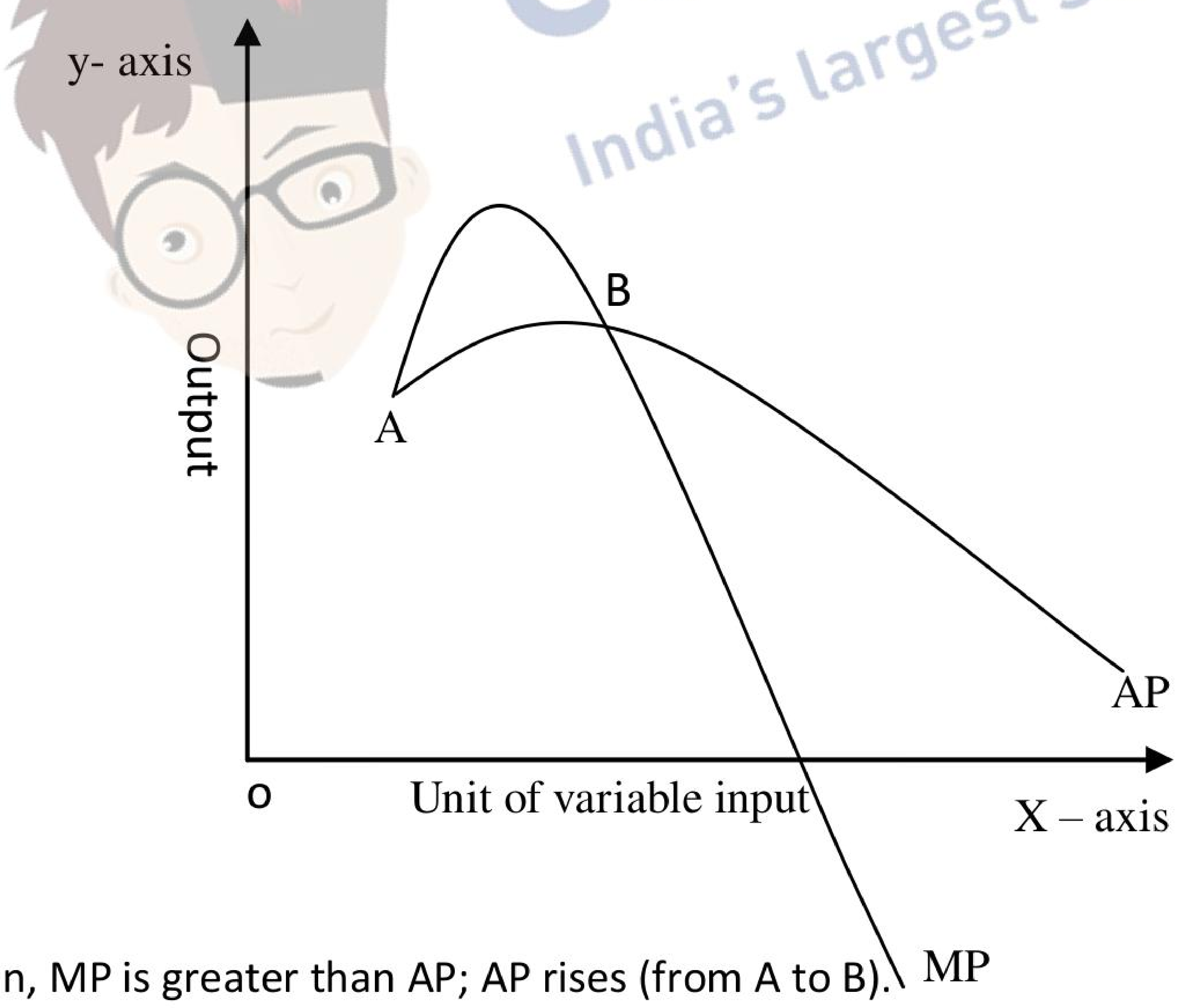
9

Output sold (in units)	**Total Revenue (in ₹)**	**Average Revenue (in ₹)**	**Marginal Revenue (in ₹)**
1	18	18	18
2	32	16	14
3	42	14	10
4	48	12	6

(½ ×8 = 4)

OR

Diagram:



2 ½

- When, MP is greater than AP; AP rises (from A to B).
- When, MP is equal to AP; AP is constant and maximum (At point B).
- When, MP is lesser than AP, AP falls (beyond B point).

1 ½

Schedule:

Units of variable factor	MP		AP

(Labour)	(in Units)		(in Units)
1	10	=	10
2	20	>	15
3	15	=	15
4	7	<	13
5	0	<	10.4
6	-4	<	8

2 ½

(any other relevant schedule with explanation)

- When, MP is greater than AP; AP rises (At 2nd unit of variable factor employed).
- When, MP is equal to AP; AP is constant and maximum (At 3rd unit of variable factor employed).
- When, MP is lesser than AP, AP falls (4th unit to 6th unit of variable factor employed).

1 ½

10

The market for a good is in equilibrium when demand for the commodity is equal to the supply of the commodity. Due to improvement in technology, the marginal cost (MC) falls which will lead to an increase in the total market supply of the commodity. This will create excess supply of the commodity in the market leading to competition among sellers to clear their unsold inventories.

In such a situation, the supply will contract due to law of supply. The market (both demand and supply) will adjust itself to a lower equilibrium price. Thus, as a result the equilibrium price will fall and equilibrium quantity will rise.

(to be marked as a whole) **(Any other relevant explanation)**

6

11

In case of two goods A and B, a consumer will at equilibrium when:

- $\frac{MU\ of\ Good\ A}{Price\ of\ Good\ A} = \frac{MUof\ Good\ B}{Price\ of\ Good\ B}$ 1
- MU falls as consumption increases 1

If the price of Good B rises the per rupee Marginal Utility derived from the consumption of Good A will be more than the consumption of Good B. This will create a situation where:

$$\frac{MU\ of\ Good\ A}{Price\ of\ Good\ A} > \frac{MUof\ Good\ B}{Price\ of\ Good\ B}$$

1

This will induce the consumer to reallocate his expenditure from Good B (less satisfying) to Good A (more satisfying). Therefore, consumer will buy more of Good A and less of Good B. As a result, MU derived from consumption of Good A decreases gradually while the MU derived from consumption of Good B increases. Eventually, this process will continue till $\frac{MU\ of\ Good\ A}{Price\ of\ Good\ A} = \frac{MUof\ Good\ B}{Price\ of\ Good\ B}$.

3

OR

<table>
<tr><td></td><td>Two Properties of indifference Curve (IC) :-
1) <u>Indifference curve (IC) is Convex to the point of origin:</u> it is because of diminishing marginal rate of Substitution. In order to gain an additional unit of Good X, the consumer is willing to give up lesser and lesser units of good Y. This is due to application of law of diminishing marginal utility.
2) <u>Indifference curve Slopes downwards from left to right</u>: As a consumer consumes more units of one commodity he must give up the consumption of some units of the other commodity, so that his level of satisfaction remains unchanged.
(any other property with valid explanation)</td><td>3
3</td></tr>
<tr><td>12</td><td>A producer is said to be in equilibrium, if both of the following conditions are simultaneously satisfied:
(1) MR is equal to MC (MR= MC).
(2) MC is greater than MR, after equilibrium.
<table>
<tr><th>Price (₹ per unit)</th><th>Output</th><th>MR</th><th></th><th>MC</th></tr>
<tr><td>8</td><td>1</td><td>8</td><td><</td><td>10</td></tr>
<tr><td>8</td><td>2</td><td>8</td><td>=</td><td>8</td></tr>
<tr><td>8</td><td>3</td><td>8</td><td>></td><td>6</td></tr>
<tr><td>8</td><td>4</td><td>8</td><td>=</td><td>8</td></tr>
<tr><td>8</td><td>5</td><td>8</td><td><</td><td>10</td></tr>
<tr><td>8</td><td>6</td><td>8</td><td><</td><td>12</td></tr>
</table>
As shown in the above schedule, sufficient condition (MC=MR) is satisfied both at 2nd unit and at 4th units of output. However, the necessary condition (MC > MR) is satisfied only at 4th level of output. Thus, the producer would attain equilibrium at 4th unit of output.</td><td>1
1
2
2</td></tr>
<tr><td></td><td>SECTION B – MACRO ECONOMICS</td><td></td></tr>
<tr><td>13</td><td>a) Short term borrowings by commercial banks</td><td>1</td></tr>
<tr><td>14</td><td>Governor of Reserve Bank of India (RBI)
Or
Money Multiplier = $\frac{1}{Legal\ \ Reserve\ \ Ratio}$</td><td>1
1</td></tr>
<tr><td>15</td><td>a) Loans advanced by world bank or d) Tax receipts (marks should be allotted for either of the two)</td><td>1</td></tr>
<tr><td>16</td><td>Revenue deficit refers to excess of government's revenue expenditure over its revenue receipts.</td><td>1</td></tr>
<tr><td>17</td><td>The given statement is not correct.
The situation of unintended accumulation of inventories arises when ex-ante aggregate demand is lesser than the ex-ante aggregate supply. This would pile up the stock with the producers, thus to tackle this situation the economy must increase AD.
(no marks to be allotted if the reason is not given or wrongly given)
Or</td><td>3</td></tr>
</table>

	b) The value of Average Propensity to Consume (APC) can be greater that unit (1). This is because total consumption can be greater than total income, due to the existence of autonomous consumption. **(no marks to be allotted if the reason is not given or wrongly given)**	1 2
18	a) The given statement is true; an excess of aggregate demand over full employment level of aggregate supply represents a situation of inflationary gap, production cannot be increased beyond this level. Increase in AD here onwards, will increase only the general price level. b) The given statement is false. Let the value of MPS = x Therefore, MPC = 4x We know that; MPC + MPS = 1 x + 4x = 1 5x = 1 MPS (x) = 1/5 = 0.20 Substituting the value of MPS in K = $\frac{1}{MPS} = \frac{1}{0.20} = 5$ Thus, the value of multiplier is 5 and not 4. **(no marks to be allotted if the reason is not given or wrongly given)**	1 ½ 1½
19	The given statement is true. Reallocation of resources refers to re-distribution of resources from one use to another. The government reallocates resources with a view to balance the goals of profit maximisation (by firms) and social welfare (by government). Production of goods which are injurious to health is discouraged through taxation. On the contrary, production of socially useful goods is encouraged through subsidies. If the private sector does not take initiative in certain activities, government directly controls them like water supply, sanitation etc. (to be marked as a whole)	4
20	Legal Reserve Ratio (LRR) is the minimum reserve that a commercial bank must maintain as per the instructions of the central bank. Credit creation is inversely related to the legal reserve deposit ratio. For example – suppose the LRR is 0.20 and initial deposits are Rs 1,000. Total credit creation = $\frac{1}{Legal\ \ Reserve\ \ Ratio}$ x Initial Deposits = $\frac{1}{0.20}\ x\ 1{,}000$ = ₹ 5,000 Now suppose, if the LRR is 0.50 and initial deposits are Rs 1,000. Total credit creation = $\frac{1}{Legal\ \ Reserve\ \ Ratio}$ x Initial Deposits = $\frac{1}{0.50}\ x\ 1{,}000$ = ₹2,000 Thus, any increase in LRR will decrease the credit creation power of the commercial banks (banking system). (Any other relevant example should be evaluated) Or **Banker's Bank:-**As the bankers to the banks, the central bank holds surplus cash reserves. It also lends to commercial banks when they are in need of funds. Central bank also provides a large number of routine banking functions to the commercial banks. It also acts as a supervisor and a regulator of the banking system. **(any other relevant explanation)**	1 1 1 1 4

<table>
<tr>
<td>21</td>
<td>Intermediate consumption = (i)- (iv)-(Indirect tax – iii) – (ii)
= 300 – 30 – (0-15) – 100
= 300 – 30 + 15 – 100
= ₹ 185 crores</td>
<td>1 ½
1 ½
½
½</td>
</tr>
<tr>
<td>22</td>
<td>
a) Wages received by an Indian working in British embassy in India is not a part of economic territory of India, as British Embassy is a part of Economic territory of Britain.
b) Financial aid is a transfer income as no factor service is provided in return. Hence, it is not included while estimating the value of GDP.
c) Purchase of second hand machinery from abroad is not included as the value of imports are deducted while estimation GDP of a country.
Or
<u>Real National Income and Nominal National Income:</u> When National Income (Product) of the current year is estimated on the basis of price prevailing in the current year, it is called Nominal National income
whereas
When nation income (product) of the current year is estimated on the basis of price prevailing in the base year, it is called Real National income.
<table>
<tr><td>Commodities</td><td>Quantity of the Current Year (Q_1)</td><td>Quantity of the Base (Q_0)</td><td>Price of the Current Year (P_1)</td><td>Price of the Base Year (P_0)</td><td>P_0Q_1 (Real NI)</td><td>P_1Q_1 (Nominal NI)</td></tr>
<tr><td>A</td><td>10</td><td>5</td><td>20</td><td>10</td><td>100</td><td>200</td></tr>
<tr><td>B</td><td>20</td><td>10</td><td>30</td><td>20</td><td>400</td><td>600</td></tr>
<tr><td>C</td><td>5</td><td>2</td><td>50</td><td>40</td><td>200</td><td>250</td></tr>
<tr><td>Total</td><td></td><td></td><td></td><td></td><td>700</td><td>1,050</td></tr>
</table>
In the above example the Real NI ($\sum P_0Q_1$) = ₹ 700 and Nominal NI ($\sum P_0Q_1$) = ₹ 1,050
</td>
<td>2
2
2
3
3</td>
</tr>
</table>

<table>
<tr>
<td>23</td>
<td>(a) Autonomous transactions are those international economic transactions which take place due to some economic motive such as profit maximisation. These transactions are independent of the state of country’s BOP.
Whereas;
Accommodating transactions are those international economic transactions that occur to cover deficit/ surplus arising out of autonomous transactions. BOP transactions are influenced by the state of BOP.

b) (i) <u>Foreign Exchange Rate</u> : It is the rate at which one currency can be converted into another currency.

(ii) <u>Foreign Currency</u> : foreign currency is the currency other than domestic currency.

(iii) <u>Devaluation of currency</u>: reduction in the value of domestic currency by the government with respect to a given foreign currency.</td>
<td>3

1

1

1</td>
</tr>
<tr>
<td>24</td>
<td>Effective demand refers to that level of output where ex-ante aggregate demand is equal to ex-ante aggregate supply.
Example:
<table>
<tr><td>Income (Y) (₹ In Cr)</td><td>Aggregate demand (AD) (₹ In Cr)</td><td>Aggregate supply (AS) (₹ In Cr)</td><td>Observation</td></tr>
<tr><td>0</td><td>400</td><td>0</td><td>AD > AS</td></tr>
<tr><td>1000</td><td>1200</td><td>1000</td><td>AD >AS</td></tr>
<tr><td>2000</td><td>2000</td><td>2000</td><td>AD = AS Effective demand</td></tr>
<tr><td>3000</td><td>2800</td><td>3000</td><td>AD < AS</td></tr>
<tr><td>4000</td><td>3600</td><td>4000</td><td>AD < AS</td></tr>
</table>
At Y=0, and Y=1000; AD > AS. This causes unplanned decrease in inventories inducing producer to produce more output.
At Y= 2000, AD =AS. This keeps the inventory level unchanged.
At Y= 3000 and Y=4000, AD < AS. This causes unplanned increase in inventory of unsold goods inducing producer to produce less.</td>
<td>2

4</td>
</tr>
</table>