

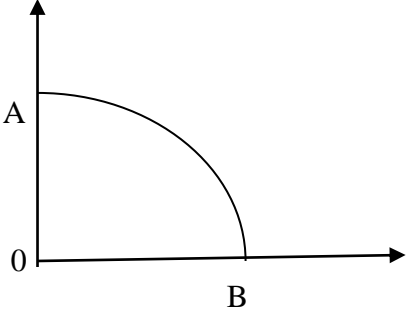
COMMON PRE-BOARD EXAMINATION 2017-2018

ECONOMICS ANSWER KEY

CLASS XII

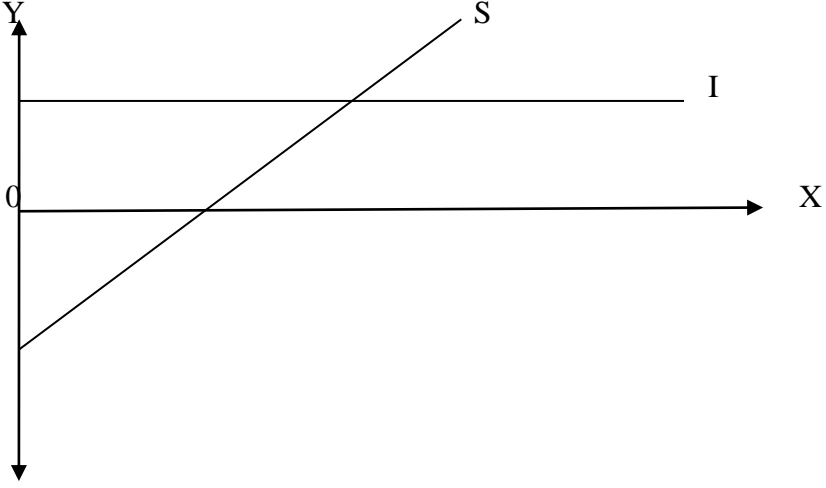
Maximum Marks: 80

SECTION- A																				
1	b)The pleasure that could have been enjoyed watching live cricket match.	1																		
2	Relation between variable input and output keeping all other inputs constant.	1																		
3	₹ 40	1																		
4	d) None of the above	1																		
5	<p>MOC/MRT can be defined as the rate of sacrifice of one good per unit increase in the production of other good.</p> $MRT = \frac{\text{Unit of one good sacrificed}}{\text{more units of the other good produced.}}$ $= \frac{\text{Change in Good Y}}{\text{Change in good X}}$ <table border="1" style="margin: 10px auto;"> <thead> <tr> <th>Good 1</th> <th>Good 2</th> <th>MRT</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>10</td> <td>-</td> </tr> <tr> <td>1</td> <td>9</td> <td>1</td> </tr> <tr> <td>2</td> <td>7</td> <td>2</td> </tr> <tr> <td>3</td> <td>4</td> <td>3</td> </tr> <tr> <td>4</td> <td>0</td> <td>4</td> </tr> </tbody> </table> <p>Diagram with explanation.</p> <p style="text-align: center;">OR</p> <p>The economy has to decide what goods and services are to be produced. For instance which of the consumer goods like cloth, sugar etc are to be produced and which of the capital goods like machines, tractors etc are to be produced. When an economy has taken a decision as to what goods or services are to be produced, then it has to decide about its quantity.</p>	Good 1	Good 2	MRT	0	10	-	1	9	1	2	7	2	3	4	3	4	0	4	3
Good 1	Good 2	MRT																		
0	10	-																		
1	9	1																		
2	7	2																		
3	4	3																		
4	0	4																		

	 <p data-bbox="277 562 1347 707">If the entire resources of the economy are diverted to produce good Y, then it will produce OA level of good Y or if the entire resources are diverted to produce good X, then it will produce only good X (ie. OB level). Economy can also select any other point on PPC.</p> <p data-bbox="277 745 884 781">Explanation with Production possibility Curve.</p>										
6	<p data-bbox="325 822 1023 927">i) Demand decreases, demand curve shift to the left ii) Demand increases, demand curve shift the right iii) Demand decreases, demand curve shift to the left</p> <p data-bbox="400 967 601 1003">(Use diagrams)</p>	1 1 1									
7	<table border="1" data-bbox="375 1115 799 1229"> <thead> <tr> <th>Tot Exp</th> <th>Price</th> <th>Qty</th> </tr> </thead> <tbody> <tr> <td>200</td> <td>5</td> <td>40</td> </tr> <tr> <td>200</td> <td>4</td> <td>50</td> </tr> </tbody> </table> <p data-bbox="375 1267 687 1373"> $E_d = \frac{\Delta Q}{\Delta P} \times \frac{P}{Q}$ $= \frac{10}{1} \times \frac{5}{40} = 1.25$ $E_d > 1, \text{ Elastic demand.}$ </p>	Tot Exp	Price	Qty	200	5	40	200	4	50	4
Tot Exp	Price	Qty									
200	5	40									
200	4	50									
8	<p data-bbox="277 1420 1062 1599">Fixing of price above equilibrium price. To protect the interest of producers, labourers etc Excess supply Unless government prepares to buy, excess supply- price fall (Implications with a diagram.)</p> <p data-bbox="794 1675 842 1711" style="text-align: center;">OR</p> <p data-bbox="277 1711 1315 1928">Chain effects of 'decrease' in demand. Diagram- decrease in demand, while supply remains unchanged leads to excess supply. Decrease in equilibrium price, contraction of supply takes place and equilibrium quantity also falls. Explanation with diagram</p>	4									
9	<p data-bbox="277 1935 1315 2038">Decrease in supply: Decrease in supply means fall in supply for a product due to changes in factors other than price. Diagram</p>										

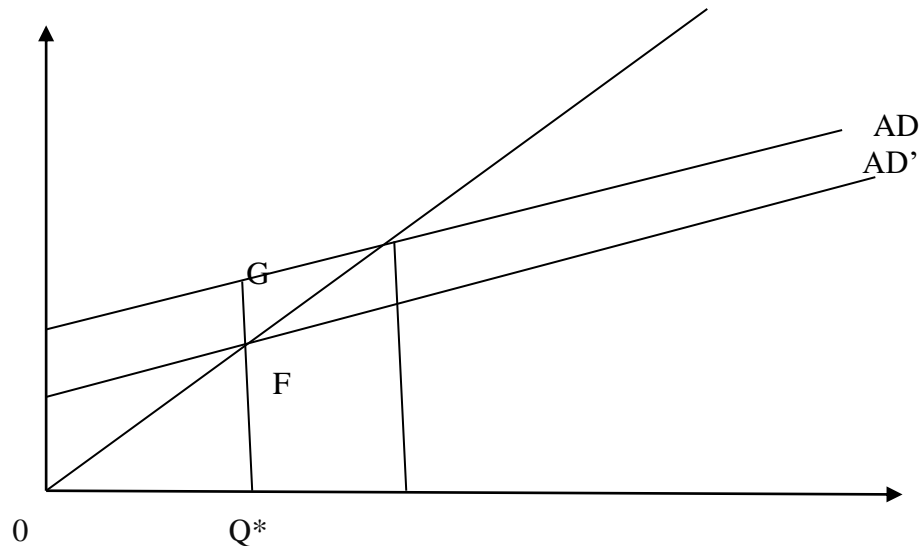
	<p>Reasons are:</p> <ul style="list-style-type: none"> • increase in unit tax • increase in input price • Deterioration in technology • Increase in price of other products <p>Contraction of supply: A fall in supply of a product due to decrease in its price alone is called contraction of supply.</p> <p>Diagrams with explanations</p>	<p>2</p> <p>2</p>
10	<p>a) Consumer will be in equilibrium by indifference curve and budget line analysis at that level at which one of the indifference curve is just tangent to the budget line.</p> <p>At this point, Slope of the indifference curve = Slope of the budget line</p> $\text{MRS} = \text{Price Ratio}$ $\text{MRS} = \frac{\text{Change in } X_2}{\text{Change in } X_1}$ $\text{MRS} = -\frac{P_1}{P_2}$ <p>(Diagram)</p> <p>In the diagram, consumer is in equilibrium at point E because at this point MRS = Price ratio and indifference curve is tangent to the budget line.</p> <p>Initially when consumer starts to substitute good 2 for good 1, MRS > Price ratio, hence consumer gains. That is, the utility received from an extra unit of good 1 is more than the utility lost from good 2.</p> <p>At the point of tangency MRS = Price ratio, ie at point E.</p> <p>If consumer further substitute good 2 for good 1, price ratio will be greater than MRS. That is why utility received from an extra unit of good 1 is less than the utility lost from good 2.</p> <p>Consumer will not select any bundle on IC1 like C and D because IC1 consists of the bundles less preferred than the bundles on IC2.</p> <p>Consumer cannot select IC3 because those bundles are budget constraints.</p> <p>.</p> <p style="text-align: center;">OR</p> <p>a). MU of good X = Price of X Table and diagram</p> <p>b). At equilibrium, If $\text{MU}_x/\text{P}_x = \text{MU}_y/\text{P}_y$, Given, $\text{MU}_x/\text{P}_x = \text{MU}_y/\text{P}_y$, $10/8 \neq 8/10$ 1.25 not equal to 0.8 So consumer is not in equilibrium.</p> <p>$\text{MU}_x/\text{P}_x > \text{MU}_y/\text{P}_y$, then it means that satisfaction of consumer, derived from spending a rupee on Good X is greater than the satisfaction derived from spending a rupee on Good Y.</p> <p>He will reallocate his income by substituting Good X for Good Y.</p> <p>As the consumption of Good X increases the marginal utility derived from it goes on diminishing and reverse proposition occurs for Good Y, this process will continue till MU_x/P_x becomes equal to MU_y/P_y.</p>	<p>6</p> <p>2</p> <p>4</p>

11	<p>a) TVC is zero at zero level of output. It initially increases at decreasing rate and later it increases at an increasing rate. It is inversely S shaped because of law of variable proportion.</p> <table border="1"> <thead> <tr> <th>Output (Units)</th> <th>Total Revenue (₹ in crores)</th> <th>Total Cost (₹ in crores)</th> <th>MR</th> <th>MC</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>5</td> <td>11</td> <td>5</td> <td>6</td> </tr> <tr> <td>2</td> <td>10</td> <td>13</td> <td>5</td> <td>5</td> </tr> <tr> <td>3</td> <td>15</td> <td>17</td> <td>5</td> <td>4</td> </tr> <tr> <td>4</td> <td>20</td> <td>22</td> <td>5</td> <td>5</td> </tr> <tr> <td>5</td> <td>25</td> <td>29</td> <td>5</td> <td>7</td> </tr> </tbody> </table> <p>Equilibrium at 4th unit. MC=MR And MC greater than MR after MC=MR level (MC rises)</p>	Output (Units)	Total Revenue (₹ in crores)	Total Cost (₹ in crores)	MR	MC	1	5	11	5	6	2	10	13	5	5	3	15	17	5	4	4	20	22	5	5	5	25	29	5	7	2 4
Output (Units)	Total Revenue (₹ in crores)	Total Cost (₹ in crores)	MR	MC																												
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3	15	17	5	4																												
4	20	22	5	5																												
5	25	29	5	7																												
12	<p>a) Perfect Competition: Under perfect competition the demand curve is horizontal straight line parallel to the X axis. It is because given the price, seller can only decide how much quantity to be sold. Therefore price elasticity of demand associated to perfect competition is infinite.</p> <p>b) Monopoly: A monopolist can sell more of the product at lower price only. Under monopoly seller is a price maker. Therefore demand curve is negatively sloped, steeper curve. Hence $ed < 1$</p> <p>c) Monopolistic Competition: Under monopolistic competition sellers face competition from differentiated products and sellers can sell more of the products at lower prices only. Therefore demand curve under this market form is negatively sloped flatter demand curve. Here $ed > 1$</p> <p>(With diagrams)</p>	2 2 2																														
SECTION B																																
13	c). on any point of time	1																														
14	b). Fiscal Deficit	1																														
15	Statutory Liquidity Ratio (SLR): Under this banks are required to maintain a specified percentage of their total demand and time deposits in the form of specified liquid assets.	1																														

16	<p>a) Revenue Receipts Tax</p> <p>b) Capital Receipts Borrowing (or any other relevant examples)</p>	<p>1/2</p> <p>1/2</p>																									
17	<table border="1" data-bbox="279 488 1093 743"> <thead> <tr> <th>Income (Y)</th> <th>MPC</th> <th>Savings (S)</th> <th>Consumption</th> <th>APC</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> <td>(-)30</td> <td>30</td> <td>-</td> </tr> <tr> <td>100</td> <td>0.75</td> <td>(-)5</td> <td>105</td> <td>1.05</td> </tr> <tr> <td>200</td> <td>0.75</td> <td>20</td> <td>180</td> <td>0.9</td> </tr> <tr> <td>300</td> <td>0.75</td> <td>45</td> <td>255</td> <td>0.85</td> </tr> </tbody> </table>	Income (Y)	MPC	Savings (S)	Consumption	APC	0		(-)30	30	-	100	0.75	(-)5	105	1.05	200	0.75	20	180	0.9	300	0.75	45	255	0.85	3
Income (Y)	MPC	Savings (S)	Consumption	APC																							
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300	0.75	45	255	0.85																							
18	 <p>In the diagram on the Y axis we measure planned saving and investment. Investment curve is parallel to X axis because we assume investment is autonomous and independent of its determinants. Saving curve begins from the negative segment of the Y axis because at low levels of income savings can be negative. As income increases saving also increases. Therefore it is positively sloped.</p> <p>The economy will be in equilibrium by S and I approach at that level of output at which planned saving = planned investment. In the above diagram, the economy is in equilibrium at OM level of output.</p> <p>If the planned savings exceeds planned investments (beyond OM level of output) accumulation of inventories takes place. Firms would respond to this by reducing the employment hence output. This process will continue till the equilibrium level of output where planned savings = planned investments.</p>	3																									

OR

If AD for a level of output is more than the full employment level of output, it is called excess demand.



The inflationary gap is the amount by which the actual aggregate demand exceeds the level of aggregate demand required to establish the full employment equilibrium.

In the diagram, economy will be in full employment equilibrium level of output at point F on the AD (C+I) curve and the economy will produce the full employment level of output OQ^* .

FG is the inflationary gap.

The inflationary gap is so called because it sets in motion forces that will cause inflation or arise in the price level. At point G, the aggregate demand curve (C+I) lies above the 45 degree line. As a result, the aggregate demand Q^*G is greater than the level of output OQ^* . The effect of this will be to create demand pull inflation (an aggregate demand induced rise in the price level).

Fiscal Policy measures: Fiscal policy measures to increase aggregate demand may be done by either increasing the level of government expenditure or by reducing the amount of taxes. If the government expenditure is increased by an amount equal to the deflationary gap, it will restore the economy to the full employment equilibrium.

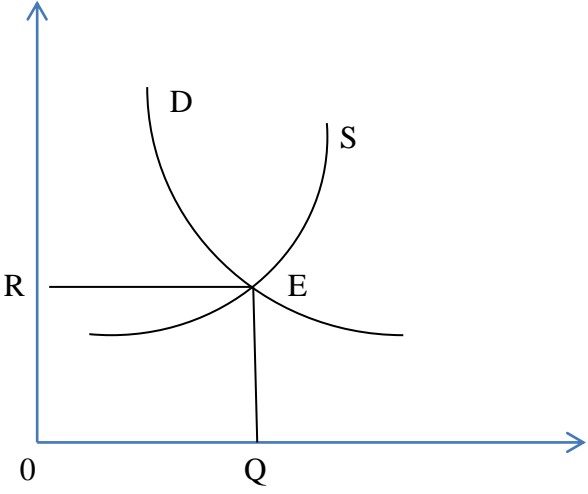
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The budget is an annual statement of the estimated receipts and expenditure of the government over the fiscal year.

- a) **Allocation function:** In an economy there are number of public goods required for normal functioning of government and the welfare of the people as a whole. Such goods cannot be provided through market mechanism.

1

	<p>Therefore public goods must be provided by the government through budgetary allocation. This is called the allocation function.</p> <p>b) Distribution function: Through its tax and expenditure policy, the government attempts to bring about a distribution of income that is considered fair by the society. The government affects the personal disposable income of households by making transfer payments and collecting taxes. In this way government can alter the income distribution. This is called distribution function.</p> <p>c) Stabilisation function: The economy tends to be subject to substantial fluctuations and may suffer from prolonged period of deflation or inflation. During excess demand government expenditure must be reduced and tax rates must be increased to control inflation and stabilize the economy. Similarly during deficient demand government expenditure must be increased and tax rate must be reduced to control deflation and stabilize the economy. This is called stabilization function.</p> <p style="text-align: center;">OR</p> <p>It implies that government is dissaving and using up the savings of the other sectors of the economy to finance a part of government consumption expenditure. This means that the government will have to borrow not only to finance its investment but also for its consumption requirements. This will increase the borrowing liability of the government which in turn force the government to cut productive capital expenditure or welfare expenditure. Increase in borrowing also increases interest payment liabilities. This will increase revenue deficit and create inflation in the economy.</p>	3																
20	<p>a). Distribution of GDP Externalities Non-monetary exchanges (Any two points with explanation)</p> <p>b).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Year</th> <th>Nominal GDP</th> <th>Real GDP</th> <th>GDP deflator</th> </tr> </thead> <tbody> <tr> <td>2014-15</td> <td>6.5</td> <td>6.5</td> <td><u>100</u></td> </tr> <tr> <td>2015-16</td> <td><u>8.4</u></td> <td>6</td> <td>140</td> </tr> <tr> <td>2016-17</td> <td>9</td> <td><u>7.2</u></td> <td>125</td> </tr> </tbody> </table>	Year	Nominal GDP	Real GDP	GDP deflator	2014-15	6.5	6.5	<u>100</u>	2015-16	<u>8.4</u>	6	140	2016-17	9	<u>7.2</u>	125	2
Year	Nominal GDP	Real GDP	GDP deflator															
2014-15	6.5	6.5	<u>100</u>															
2015-16	<u>8.4</u>	6	140															
2016-17	9	<u>7.2</u>	125															
21	<p>a). The bank rate is the rate at which the central bank lends funds to commercial banks. If the Central Banks wants to follow costlier credit policy (dear money policy) it will raise the bank rate and vice versa.</p> <p>b). OMO is the buying and selling of government securities by the Central Bank from/to the public and the banks. If the Central Bank wants to follow costlier credit policy it will sell govt securities to the public and the banks.</p>	4																
22	<p>Expenditure method: $GDP @ MP = PFCE + GFCE + NDCF + Dep + Net export$ $= 4000 + 1000 + (500 + 40) + (-50)$ $= 5490$</p>																	

	<p>NI or NNP @ FC= GDP @ MP- NIT-Dep+NFA = 5490-300-40+(-30) = 5120 (3 marks)</p> <p>Income method: NNP @fc = Domestic Income+ NFIA = 4000 + 1150+ (-30) = 5120 (3marks)</p>	<p>3</p> <p>3</p>
<p>23</p>	<p>a). There are two types of account- current account and capital account.</p> <p>1. Current Account: It records the following three items.</p> <p>a) Balance of <i>visible trade</i>: b) <i>Invisible trade</i>: c) <i>Unilateral transfers</i>:</p> <p>2. Capital Account:It records all international transactions that involve a resident of the domestic country changing his assets with a foreign resident or his liabilities to a foreign resident.</p> <p>b. Current account and its non-reserve capital account equals to zero. So that current account balance is financed entirely by international lending without reserve movements.</p> <p>c.What do you mean by autonomous transactions in BOP? Undertaken with an economic objective or any other relevant point.</p> <p style="text-align: center;">OR</p> <p>a.Flexible exchange rate is that rate which is determined by the general interaction between demand and supply of foreign exchange.</p> <div style="text-align: center;">  </div> <p>Demand curve for foreign exchange is negatively sloped because there is an inverse relationship between exchange rate and demand for foreign exchange, ie at high rate of exchange less foreign exchange will be demanded and vice-versa. Supply curve for foreign exchange is positively sloped because there is a direct relation between exchange rate and supply of foreign exchange, ie at high rate of exchange more foreign exchange will be supplied and vice-versa. In the above diagram, exchange rate is determined at the point E, where demand and supply of foreign exchange are equal. Therefore OR is the equilibrium exchange rate.</p>	<p>4</p> <p>1</p> <p>1</p> <p>4</p>

b). Foreign buyers will be able to buy more from one unit of currency as a result of currency depreciation. This makes export cheaper for the foreign buyers. As a result exports are likely to increase (To be explained)

2

24 The relationship between consumption and income is called the consumption function.

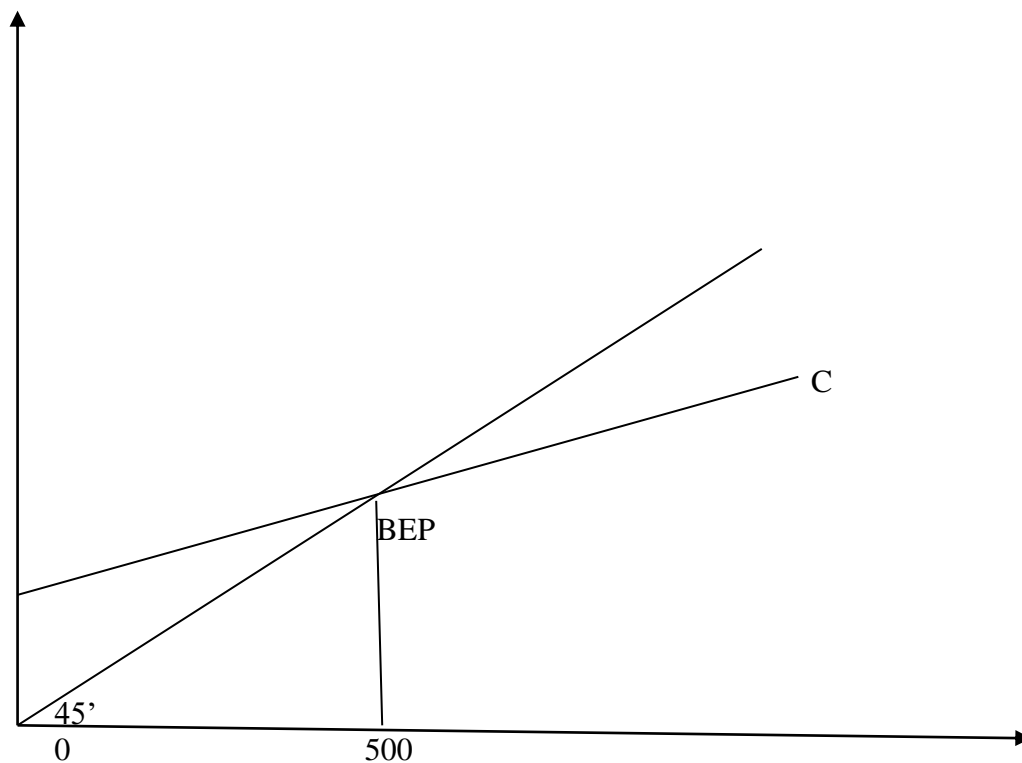
6

Consider a consumption function given by $C = 100 + 0.8 Y$

Since this is an equation of a straight line, the consumption function will have a constant slope. We also assume that MPC is constant.

Table given below shows the level of consumption for various levels of income.

Income (Y)	Consumption (C)	Change in Income (ΔY)	Change in Consumption (ΔC)	MPC ($\Delta C / \Delta Y$)
0	100	-	-	-
100	180	100	80	0.8
200	260	100	80	0.8
300	340	100	80	0.8
400	420	100	80	0.8
500	500	10	80	0.8
600	580	100	80	0.8
700	660	100	80	0.8
800	740	100	80	0.8
900	820	100	80	0.8
1000	900	100	80	0.8



	<p>In the diagram we measure consumption on Y axis and income on X axis. The 45° line is drawn on the assumption that $\text{Income} = \text{Consumption}$.</p> <p>The consumption function curve intersect 45° line at Rs 500 level of income. This point is called <u>break even point</u>. Any level of income less than Rs 500 (less than break even point) means that consumption is greater than income which gives rise to dissavings. Any level of income higher than Rs 500 (higher than break even point) consumption is less than income which give rise to savings.</p> <p>Saving or dissaving is measured based on the vertical distance between 45° line and consumption function curve.</p>	
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