

# SENIOR SCHOOL CERTIFICATE EXAMINATION JULY-2018

## MARKING SCHEME – COMPARTMENT ECONOMICS (DELHI)

### Expected Answers / Value Points

#### GENERAL INSTRUCTIONS :

- 1 The Marking Scheme carries only suggested value points for the answers. These are only guidelines and do not constitute the complete answers. Students can have their own expression and if the expression is correct, marks should be awarded accordingly.
- 2 As per orders of the Hon'ble Supreme Court, a candidate would now be permitted to obtain a photocopy of his/her Answer Book on payment of the prescribed fee. Examiners/Head Examiners are, therefore, once again reminded that they must ensure that evaluation is carried out strictly as per value points for each answer as given in the Marking Scheme.
- 3 Head Examiners/Examiners are hereby instructed that while evaluating the answer books, if the answer is found to be totally incorrect, the (X) should be marked on the incorrect answer and awarded '0' mark.
- 4 Please examine each part of a question carefully and allocate the marks allotted for the part as given in the 'Marking Scheme' below. TOTAL MARKS FOR ANY ANSWER MAY BE PUT IN A CIRCLE ON THE LEFT SIDE WHERE THE ANSWER ENDS.
- 5 Expected/suggested answers have been given in the 'Marking Scheme'. To evaluate the answers, the value points indicated in the marking scheme should be followed.
- 6 For questions asking the candidate to explain or define, the detailed explanations and definitions have been indicated along with the value points.
- 7 For mere arithmetical errors, there should be minimal deduction. Only  $\frac{1}{2}$  mark should be deducted for such an error.
- 8 Where only two / three or a 'given' number of examples / factors / points are expected, only the first two / three or expected number should be read. The rest are irrelevant and must not be examined.
- 9 There should be no effort at 'moderation' of the marks by the evaluating teachers. The actual total marks obtained by the candidate may be of no concern to the evaluators.
- 10 Higher order thinking ability questions are for assessing a student's understanding / analytical ability.

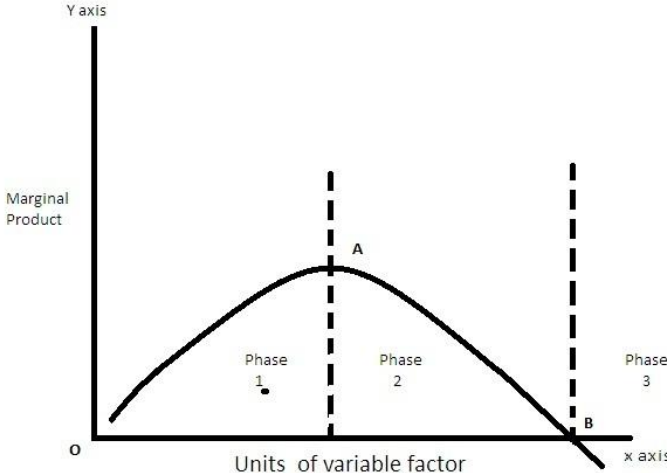
**General Note: In case of a numerical question, no marks should be awarded if only the final answer has been given, even if it is correct.**

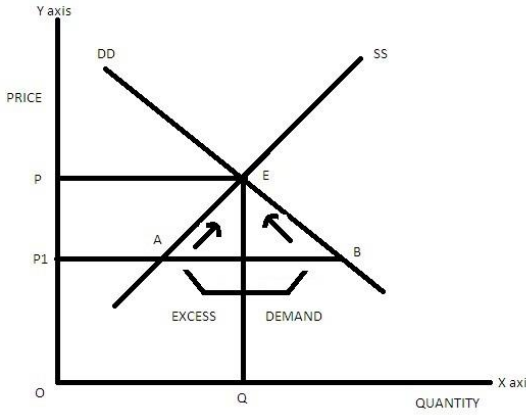
**Expected Answers / Value Points**

QUESTION. NO.			SECTION – A	Marks																
Set 1	Set 2	Set 3																		
1.	4.	2	Growth of resources or improvement in technology. (any one)	1																
2.	3	4	Marginal Product is the addition to the total product by employing an additional unit of variable factor (labour).	1																
3.	2	1	(d) Average Fixed Cost	1																
4.	1	3	(b) Average Revenue = Marginal Revenue (AR = MR)	1																
5.	6	5	<p>Marginal opportunity cost is the ratio of number of units of a good sacrificed (Good Y) to produce an additional unit of another good (Good X).</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Combinations</th> <th>Good X</th> <th>Good Y</th> <th><math>MOC = \frac{\Delta y}{\Delta x}</math></th> </tr> </thead> <tbody> <tr> <td>A</td> <td>0</td> <td>15</td> <td>-</td> </tr> <tr> <td>B</td> <td>1</td> <td>14</td> <td>1:1</td> </tr> <tr> <td>C</td> <td>2</td> <td>12</td> <td>2:1</td> </tr> </tbody> </table> <p>Suppose an economy shifts from combination (0X,15Y) to (1X,14Y), then MOC of producing one more unit of X is 1Y. Similarly, if the economy shifts from combination (1X,14Y) to (2X,12Y), then MOC of producing one more unit of X is 2Y.</p> <p align="center"><b>(any other relevant numerical example)</b></p> <p align="center"><b>OR</b></p> <p>Assumptions of Production Possibility Curve:</p> <ol style="list-style-type: none"> <li>1. Available resources are fixed.</li> <li>2. State of technology remains unchanged.</li> <li>3. Available resources are fully utilised.</li> <li>4. The resources are efficiently employed.</li> <li>5. The resources are not equally efficient in production of all products.</li> </ol> <p align="right"><b>(any three)</b></p>	Combinations	Good X	Good Y	$MOC = \frac{\Delta y}{\Delta x}$	A	0	15	-	B	1	14	1:1	C	2	12	2:1	<p align="right">1</p> <p align="right">2</p> <p align="right">1x3=3</p>
Combinations	Good X	Good Y	$MOC = \frac{\Delta y}{\Delta x}$																	
A	0	15	-																	
B	1	14	1:1																	
C	2	12	2:1																	

6.	5	6	<p>Market demand is the sum of quantity demanded which all the consumers are willing to buy at a given price during a period of time.</p> <p>Factors of increase in market demand :-</p> <ol style="list-style-type: none"> <li>1. Rise in income of consumers (in case of a normal goods).</li> <li>2. Favourable change in taste &amp; preferences.</li> <li>3. Increase in number of consumers.</li> <li>4. Fall in price of complementary goods.</li> <li>5. Rise in price of substitute goods.</li> </ol> <p><b>(any two)</b></p> <p><b>(any other relevant factor must be evaluated)</b></p>	<p>1</p> <p>1x2= 2</p>
7.	9	8	$Ed_x = \frac{\text{percentage change in quantity demanded of Good X}}{\text{percentage change in price of the Good X}}$ $Ed_x = \frac{10\%}{-5\%} = -2$ $Ed_y = \frac{\text{percentage change in quantity demanded of Good Y}}{\text{percentage change in price of the Good Y}}$ $Ed_y = \frac{-10\%}{20\%} = -0.5$ <p>Good X is more elastic</p>	<p>1/2</p> <p>1</p> <p>1/2</p> <p>1</p> <p>1</p>
8.	7	9	<p>Under oligopoly as there are only a few big firms competing in the market, each firm considerably affects and is affected by the other firms. Any action of a firm with respect to price or output is likely to create quick reaction by the rival firms and they may change their own price and output plans.</p> <p>Therefore, the given firm, expecting reactions from its rivals, takes into account such possible reactions before taking any decision about the price and output. It makes each firm dependent on other firms in the industry.</p> <p style="text-align: center;">OR</p> <p>Under perfect competition there are large numbers of sellers. Each firm has insignificant share in total market supply, so the firm cannot influence the market price by changing its supply. Thus the firm has no alternative but to sell its output at the prevailing market price and is therefore called a <b>'price-taker'</b>.</p> <p>Whereas, under monopoly there exists only a single seller, any change in the supply plan of that seller has substantial influence over the market price. That is why a monopolist is called a <b>'price-maker'</b>.</p>	<p>4</p> <p>2</p> <p>2</p>

9.	8	7	<p>A producer is said to be in equilibrium at that level of output where <math>MR=MC</math>, because at this level of output producer earns maximum profit but it should be followed by rising <math>MC</math> at additional level of output.</p> <p><b>Equality between marginal revenue and marginal cost is not a sufficient condition</b> as there may be a possibility of <math>MC</math> being less than <math>MR</math> (<math>MC &lt; MR</math>), if additional units are produced. In this situation it will not be profitable for the firm to stop production.</p> <p>Therefore, in this case even though <math>MC = MR</math> the producer is not in equilibrium. However, after this level of output (<math>MR=MC</math>) if <math>MC</math> becomes greater than <math>MR</math> (<math>MC &gt; MR</math>), it will be less profitable for the firm to produce more.</p> <p style="text-align: right;"><b>(Diagram not required)</b></p> <p style="text-align: right;"><b>(to be marked as a whole)</b></p>	4
10.	11	12	<p>a) Budget line – is the locus of all such possible bundles of two goods (X and Y), which would cost the consumer exactly equal to his income.</p> $(P_x)(Q_x) + (P_y)(Q_y) = M$ <p>b) Budget set – is the combinations of all possible bundles of two goods (X and Y), which the consumer can afford/purchase within his given money income at the prevailing market prices.</p> $(P_x)(Q_x) + (P_y)(Q_y) \leq M$ <p>c) Indifference map – is the set (or family) of indifference curves representing different levels of satisfaction for the consumer.</p> <p style="text-align: right;"><b>(Diagrams not required)</b></p> <p style="text-align: center;"><b>Or</b></p> <p>(i) Slope of the Budget Line = <math>\frac{P_x}{P_y}</math> (ignoring minus sign)</p> $= \frac{20}{10} = 2$ <p>(ii) Units of Good X, if entire income of consumer (₹500) is to be spent on Good X only (X-intercept)</p> $= \frac{M}{P_x}$ $= \frac{500}{20} = 25 \text{ units}$ <p>(iii) New Price of Good Y = Original Price – 50% of Original Price</p> $= 10 - 5 = ₹5$ <p>New Budget line equation <math>\rightarrow 20X + 5Y = 500</math></p> <p>Slope of the new Budget line = <math>\frac{P_x}{P_y}</math> (ignoring minus sign)</p> $= \frac{20}{5} = 4$	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>2</p> <p>1/2</p> <p>1/2</p> <p>1</p> <p>1</p> <p>1</p> <p>1/2</p> <p>1</p> <p>1/2</p>

11.	12	10	<p>In short run production function, only one factor input is varied and other inputs remaining unchanged, whereas; in long run production function all the factor inputs are varied.</p>  <p><b>Three phases</b></p> <p>Phase I - Initially, MP rises till it reaches to its maximum point A.</p> <p>Phase II - MP falls but remains positive, between points A and B.</p> <p>Phase III - MP becomes negative after point B.</p> <p><b>For Blind Candidates:</b></p> <p>In short run production function, only one factor input is varied and other inputs remaining unchanged, whereas; in long run production function all the factor inputs are varied.</p> <table border="1" data-bbox="587 1120 1232 1579"> <thead> <tr> <th>Variable Factor (labour) (in units)</th> <th>MP (in units)</th> <th>Phases</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>-</td> <td rowspan="4"><b>I</b></td> </tr> <tr> <td>1</td> <td>1</td> </tr> <tr> <td>2</td> <td>2</td> </tr> <tr> <td>3</td> <td>3</td> </tr> <tr> <td>4</td> <td>2</td> <td rowspan="3"><b>II</b></td> </tr> <tr> <td>5</td> <td>1</td> </tr> <tr> <td>6</td> <td>0</td> </tr> <tr> <td>7</td> <td>-1</td> <td><b>III</b></td> </tr> </tbody> </table> <p><b>Three phases</b></p> <p>Phase I - Initially, MP rises upto 3<sup>rd</sup> level of output.</p> <p>Phase II - MP falls but remains positive, between input levels 3 to 6, where output becomes zero at 6<sup>th</sup> unit of variable input.</p> <p>Phase III - MP becomes negative after input 7<sup>th</sup> unit is employed.</p> <p><b>(Any other relevant schedule to be evaluated)</b></p>	Variable Factor (labour) (in units)	MP (in units)	Phases	0	-	<b>I</b>	1	1	2	2	3	3	4	2	<b>II</b>	5	1	6	0	7	-1	<b>III</b>	<p>2</p> <p>1</p> <p>1</p> <p>1</p> <p>2</p> <p>1</p> <p>1</p> <p>1</p>
Variable Factor (labour) (in units)	MP (in units)	Phases																								
0	-	<b>I</b>																								
1	1																									
2	2																									
3	3																									
4	2	<b>II</b>																								
5	1																									
6	0																									
7	-1	<b>III</b>																								

12.	10	11	 <p>Excess demand means a situation when market demand is greater than market supply at a given price.</p> <p>As shown in the figure, excess demand(AB) will lead to the competition among buyers which will push the price upwards, because buyers will not be able to buy all they want to buy. As a result price will start moving upwards. At higher price sellers will supply more and buyers will demand less. There will be upward movement along the demand and supply curves, till the market reaches equilibrium at point E.</p> <p><b>For Blind Candidates:</b> Correct Relevant Schedule Explanation with any relevant schedule</p>	2  4  2 4
<b>Section B</b>				
13.	14	15	Anything which is commonly accepted as a medium of exchange.	1
14.	16	13	Revenue receipts are those receipts of the government which neither create any liabilities nor reduce any assets.	1
15.	13	16	(c) both (a) and (b)	1
16.	15	14	(b) Other than interest payments	1
17.	18	17	<p>(i) Equilibrium level of income will be determined when</p> $Y=C+I$ $Y = 500+0.9Y+1000$ $Y-0.9Y = 1500$ $Y = 1500/0.10 = ₹15,000 \text{ crore.}$ <p>(ii) Value of Investment Multiplier = <math>\frac{1}{1-MPC}</math></p> $= \frac{1}{1-0.9} = 10$	1/2 1/2 1/2  1/2 1/2 1/2
18.	17	18 OR INTER CHANGE	<p>Bank rate is that rate of interest at which the central bank lends money to the commercial banks. In case of deficient demand there is a need to liberalize credit. It can be done by reducing bank rate so that the commercial banks also reduce their lending rate, thereby increasing the availability of credit in the economy.(to be marked as a whole)</p> <p style="text-align: center;">Or</p> <p>Margin requirement is the difference between amount of loan offered and</p>	3

			the market value of security offered against the loan. Higher the margin requirement lesser will be the demand for loan. In this situation of excess demand there is a need to restrict loan/credit which can be done by raising the margin requirements. <b>(to be marked as a whole)</b>	<b>3</b>
<b>19.</b>	20	21	(a) Subsidies – Revenue Expenditure, as it neither lead to any reduction in liabilities nor any increase in assets. (b) Repayment of Loans – Capital Expenditure, as it leads to reduction in liabilities. (c) Expenditure on collection of taxes - Revenue Expenditure, as it neither lead to any reduction in liabilities nor any increase in assets. (d) Expenditure on building a bridge – Capital Expenditure, as it leads to creation of an asset. <b>(No marks to be allotted if no reason is given or reason is wrong)</b>	<b>1</b> <b>1</b> <b>1</b> <b>1</b>
<b>20.</b>	21	19	<b>Non Monetary Exchanges:</b> are those activities in an economy which cannot be evaluated in terms of money due to non-availability of data, e.g. domestic services provided by family members at home, barter exchanges etc. Although these activities contribute to welfare, they are a major cause of underestimation of GDP in the economy. Therefore, GDP may not give the true picture of welfare of a country. <b>(to be marked as a whole)</b>	<b>4</b>
<b>21.</b>	19	20	Banker's Bank – the central bank controls, organizes, regulates, directs and supervises the commercial banks. It performs various banking functions with the commercial banks like lending funds, maintaining reserves of the banks, parking the surplus funds of the banks etc. These kinds of the reserves can be utilized by the central bank in the case of any crisis. <b>(to be marked as a whole)</b> <b>Or</b> Money multiplier refers to the process of creation of credit by the commercial banks, with the help of initial deposits made by the public and legal reserve ratio. $\text{Money Multiplier} = \frac{1}{\text{legal reserve ratio}}$ Suppose there is an initial deposit of ₹1000 crores and the legal reserve ratio is 10%; then $\text{Money Multiplier} = \frac{1}{0.10} = 10$ $\text{Total Deposits} = \text{Initial Deposit} \times \frac{1}{\text{legal reserve ratio}}$ $\text{Credit Creation} = 1000 \times 10 = ₹10,000 \text{ crores}$ <b>(Or any other relevant numerical example with explanation)</b> <b>(to be marked as a whole)</b>	<b>4</b> <b>4</b>
<b>22.</b>	23	24	<b>i) Real GDP:</b> When Gross Domestic Product is evaluated at constant/base year prices.  <b>ii) a) GNPmp (Expenditure Method) = (ii) + (iv) + (vii) – (viii) + (xi)</b> $= 200+50+60-(10)+(-20)$ $= ₹280 \text{ crores}$ <b>b) GNPmp (Income Method)</b>	<b>2</b> <b>1</b> $\frac{1}{2}$ $\frac{1}{2}$

			$= (i) + (iii) + (v) + (vi) + (xiii) + (ix) + (x) + (xi)$ $= 100 + 20 + 10 + 10 + 110 + 20 + 30 + (-20)$ $= ₹ 280 \text{ crores}$	<b>1</b> $\frac{1}{2}$ $\frac{1}{2}$
23.	24	23	<p>(i) False, average propensity to save can be negative at a level when consumption is greater than income.</p> <p>(ii) False, value of marginal propensity to consume cannot be greater than one as change in consumption cannot be greater than change in income.</p> <p>(iii) True, average propensity to consume can be greater than one, when consumption is greater than income.</p> <p style="text-align: center;"><b>(no marks if reason not given or reason is wrong)</b></p>	<b>2</b>  <b>2</b>  <b>2</b>
24.	22	22	<p>(a) <u>Devaluation</u> of currency means fall in the value of domestic currency with respect to a foreign currency under the fixed exchange rate system, whereas, <u>depreciation</u> of currency means the fall in the value of domestic currency under the flexible exchange rate system</p> <p>(b) Autonomous transactions in BoP are transactions which are independent of the state of BOP whereas, accommodating transactions are the transactions undertaken to cover deficit/surplus in BOP.</p> <p><u>Significance of distinction:</u>  The deficit/surplus in BOP is determined by autonomous transactions only. BOP is said to be in deficit when autonomous receipts fall short of autonomous payments.</p> <p style="text-align: center;">Or</p> <p><u>(i) Imports of Machinery –</u></p> <p>a) Recorded as visible items in the current account, because it does not change any liability or an asset.</p> <p>b) Recorded on debit side because it leads to outflow of foreign exchange.</p> <p><u>(ii) Investments from aboard-</u></p> <p>a) Recorded in capital account because it creates a liability to pay foreign exchange.</p> <p>b) Recorded on credit side because it leads to inflow of foreign exchange.</p> <p style="text-align: right;"><b>(No marks if reason is not given)</b></p>	<b>2</b>   <b>3</b>  <b>1</b>   $1\frac{1}{2}$  $1\frac{1}{2}$  $1\frac{1}{2}$  $1\frac{1}{2}$