

Answers to RSPL/1

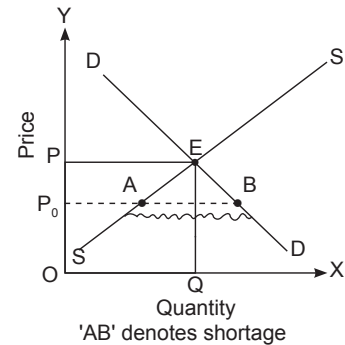
Section - A

1. (b)
2. In an imperfectly competitive market, the Marginal Revenue Curve is a 'downward sloping' curve.
3. (d)
4. If in an oligopoly market, the firms co-operate with each other in determining the price and output, it is called 'collusive oligopoly'.
5. (a) Essential of life like water is a necessity so it has inelastic demand. This is so because the consumer has to buy it, even though its price goes up.
 (b) If for the given commodity substitutes are not available, it will have inelastic demand. For example, salt.
 (c) Lesser the amount of income spend upon a commodity, its demand is said to be generally inelastic like match box, needles etc. On the other hand, when more income is spent on certain commodities like luxurious items, their demand is said to be more elastic.
6. Non-price competition in an oligopoly market implies that a firm distinguish its product by offering quality of service, customer focus, coupons, gifts etc. other than price. Firms are engaged in non-price competition in spite of the additional costs involved, because it is more profitable than selling at a lower price and avoid the risk of a price-war.

Or

Maximum price ceiling refers to the imposed upper limit on the price of a good charged by the government. Since price ceiling is lower than the equilibrium price OP , it leads to a situation of excess demand or shortage to the tune of 'AB' as shown in the diagram.

Maximum price ceiling is normally imposed on essential items needed by the masses like foodgrains, medicines, wheat, sugar, rice etc.

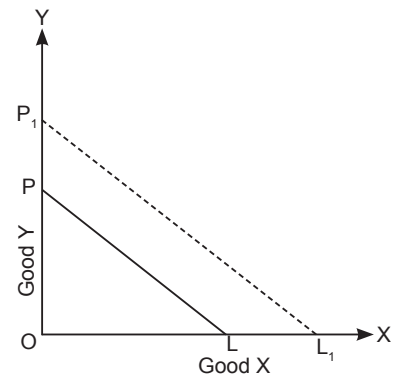


7. The large scale inflow of foreign capital will lead to an increase in the availability of resources, which will raise the production potential of the country which will thereby generate more employment, more income etc. in the economy, thus leading to an upward shift of the production possibility curve.

8. A budget line shows the various combinations of the two goods which a consumer can purchase with his given income and prices of the two goods.

Budget line will shift to the right when there is a rise in income with prices unchanged. The given diagram illustrates the shift of budget line.

It is evident from the given diagram that before income rises, the budget line is PL and when income rises, the new budget line would be P_1L_1 . Thus, budget line shifts to the right as P_1L_1 .



Or

Marginal Rate of Substitution (MRS) means the rate at which a consumer is willing to sacrifice quantity of one good to obtain more units of the other good.

Let the two goods being consumed be A and B. Suppose, the different combinations of these two goods, having the same utility level are:

Good A	Good B	MRS = $\frac{\Delta B}{\Delta A}$
1	8	—
2	4	4B : 1A
3	1	3B : 1A

The consumer is willing to sacrifice 4 units of good B to obtain second unit of good A. For the third unit of good A, he is willing to sacrifice less because Marginal Utility of good A decreases as he consumes more of good A. MRS decreases continuously, as the given consumer moves downwards along the indifference curve.

9.

Output (Units)	MR (₹)	TR (₹)	AR (₹)
1	10	10	10
2	8	18	9
3	0	18	6
4	-2	16	4

Formulae used:

$$MR = TR_n - TR_{n-1}$$

$$TR = MR_n + MR_{n-1}$$

$$AR = \frac{TR}{Q} = \frac{P \times Q}{Q}$$

10. (a) At equilibrium

$$q^d = q^s$$

$$1,000 - p = 700 + 2p$$

$$3p = 1,000 - 700$$

$$p = \frac{300}{3} = 100$$

∴ Equilibrium price = ₹ 100

Now we put the value of equilibrium price into either the demand curve equation on the supply curve equation.

$$q^d = 1000 - p = 1000 - 100 = 900$$

or $q^s = 700 + 2p = 700 + 2(100) = 900$

Thus, the equilibrium quantity is 900 units.

(b) Now when the price of an input used increases, then the new supply curve becomes

$$q^s = 400 + 2p \text{ (new supply curve)}$$

For equilibrium $q^d = q^s \text{ (new)}$

$$1,000 - p = 400 + 2p$$

$$3p = 1,000 - 400$$

- (b) (iii) 'An indifference curve to the right shows less utility level' is a wrong statement for the Indifference curve theory.
- An indifference curve to the right shows higher utility level and not less utility level as stated.
 - This is because it represents more quantity of both the goods taken together and more quantity of goods means more higher utility.

Or

The three factors determining elasticity of demand are:

- (a) Nature of the commodity affects the price elasticity of demand. This implies that if the use of the commodity is a matter of habit with the given consumer, *i.e.*, it is a necessary item, then its demand will be less elastic, such as cigarettes or liquor consumption would be a necessary item for the consumers who are addicted to it, so their demand is less elastic.
- (b) More the number of users of a good, more is likely to be the elasticity of that good such as fruits.
- (c) More the proportion of income spent on a good, more is likely to be its elasticity of demand. Such as proportion of income spent on the consumption of fruits is high, so its elasticity of demand will be more. On the other hand, proportion of income spent on salt is very small, so its elasticity of demand will be less.
- (d) More the number of close substitutes of a good, higher is its elasticity of demand and vice-versa.
- (e) Higher the price of a good, higher is likely to be its elasticity of demand, *i.e.* a change in the price of luxuries affects the total budget of a consumer. (any three)

Section - B

13. The part of LRR kept by the banks with themselves is known as "Statutory Liquidity Ratio".
14. The two instruments of monetary policy of Reserve Bank of India are:
 - (a) Quantitative instruments
 - (b) Qualitative instruments
15. (c)
16. 'Involuntary unemployment' refers to a situation in which people are ready to work at the current wage rate but do not find work.
17. **Revenue expenditure** is that expenditure of the government which neither results in creation of any asset nor reduction in any liability. It is financed out of revenue receipts. Example: Expenditure on payment of salary, pension, interest etc. (any two)
 whereas **Capital expenditure** is that expenditure which leads to creation of an asset or a reduction in the liability. Briefly it is the expenditure on creation of assets. It is financed out of borrowings from the public and foreign government bodies.
 Examples: Expenditure on construction of roads, bridges, canals, repayment of loans etc. (any two)

Or

- (a) Recovery of loans is a **capital receipt**, because when loans are recovered from the borrowers, the assets of the government are reduced.
- (b) Interest received on loans is a **revenue receipt**, because it neither increases liabilities nor reduces assets.
- (c) Dividends received from public enterprise is a **revenue receipt**, because it neither increases liabilities nor reduces assets.

18. • Tax revenue is the revenue that arises on account of taxes levied by the government, whereas the administrative revenue is the revenue that arises on account of the administrative function of the government.
- Tax revenue includes taxes of both types, *i.e.*, direct and indirect taxes whereas administrative revenue includes fees, license fees, fines and penalties levied for an infringement of a law.
19. Externalities refer to the benefits (or harm) a firm or an individual causes to another for which it is not paid (or penalised).

Example: Usage of public parks by the people for pleasure is a positive externality for which no payment is made by the public. This increases welfare of the people by using the park for a walk. It will definitely improve their health, raising their efficiency, who will thereby now contribute more productively. As a result, both, Gross Domestic Product and welfare, will increase in the economy.

Or

- Intermediate goods are those goods which are purchased during the year, by one production unit from the other production units and completely used up or resold, during the same year. For example, raw materials, like wheat, cotton etc.
 - Whereas final goods are those goods which are purchased or own-produced for the purpose of consumption (C) and investment (I). For example, milk purchased by an household, TV set purchased by an household, machine purchased for installation in a factory etc.
 - In the estimation of national income, we take into account the value of final goods only. Value of intermediate goods is not taken into account separately, in order to avoid the '**problem of double counting**'.
20. Money multiplier/credit multiplier indicates the maximum amount of additional money that the commercial banks can legally create.
- It is determined by the formula:

$$k = \frac{1}{\text{LRR}}$$

where LRR is reserve requirement, as a percentage of demand deposits of the commercial banks.

The two ratios that play an important role in the determination of the value of money multiplier are:

- Cash Reserve Ratio (CRR)
- Currency Deposit Ratio (CDR)

Higher CRR lower the volume of credit creation and vice-versa.

CDR tells us how much of additional cash be released by the RBI and received by the public is actually deposited in the bank.

21. In an economy when Aggregate Demand (AD) is not equal to Aggregate Supply (AS), it could be either of the following case.

(a) **AD < AS**

In an economy, if AD is less than AS, it implies that the buyers are planning to purchase less than what sellers are planning to produce. As a result, inventories start piling up and rise above the desired level. Thus, the producers reduce production and workers are

thrown out of jobs. This leads to a fall in the income level, *i.e.*, AS. This downward trend continues till AD once again becomes equal to AS, *i.e.*, the economy reaches the stage of equilibrium, *i.e.*, AD = AS.

(b) **AD > AS**

In an economy, if aggregate demand (AD) is greater than aggregate supply (AS), it implies that buyers now plan to purchase more goods and services than producers are planning to supply. Producers keep ready stock in the form of 'inventories'. When AD > AS, this implies that buyers are buying faster than what the sellers had expected. Thus, the inventories start falling and fall below the desired level. So, to bring back the inventories at their desired level, producers produce more, which raises the income level, which keeps on going up, till AD = AS, once again.

22. (a) The main steps involved in the measurement of national income (NI) by the production/ value-added method are:

Step (I). Classification of the producing enterprises into industrial sectors like primary, secondary and tertiary sector.

Step (II). Estimation of the NVA at factor cost (NVA_{FC}) by each producing enterprise by taking the following sub-steps:

- (i) Estimate the value of output by adding sales and change in stock.
- (ii) Estimate the value of intermediate consumption (IC) and deduct the same from value of output to arrive at Gross Value Added at market price (GVA_{MP}).
- (iii) Deduct Depreciation and Net Indirect Taxes (NIT) from GVA_{MP} to arrive at Net Value Added at factor cost.

Symbolically, $NVA_{FC} = \text{Value of output} - \text{IC} - \text{D} - \text{NIT}$

Step (III). Take the sum of NVA_{FC} by all the producing enterprises to arrive at NDP_{FC} *i.e.* $NDP_{FC} = \sum NVA_{FC}$.

Step (IV). Finally add Net factor income from abroad to the NDP_{FC} to arrive at NNP_{FC} or National Income.

Symbolically: $NNP_{FC}/NI = NDP_{FC} + \text{NFIA}$

- (b) $NVA_{FC} = (ii) + (vii) - (iii) - (iv) - (vi)$
 $= 3,500 + 50 - 2,000 - 500 - 350$
 $= ₹ 700 \text{ lakhs}$

Or

- (a) Net Indirect Taxes (NIT) will be a part of a country's 'Net Domestic' Product at Market Price (NDP_{MP}) because when the value is being calculated at market price 'NIT' is included.
- (b) Net exports will also be a part of NDP at MP because they are important part of the expenditure incurred on NDP.
- (c) NFIA will not be a part of NDP_{MP} because the aggregate is calculated as a domestic aggregate and not as a national aggregate. So, it will not be taken into account at domestic level.
- (d) Consumption of fixed capital (depreciation) will also not be a part of NDP_{MP} , as this aggregate is a net value and not gross, so consumption of fixed capital is not taken into account.

23. • BoP transactions independent of all other BoP transactions are called autonomous transactions whereas the transactions undertaken to cover deficit or surplus in the autonomous transactions are called accomodating transactions.

For example, an export transaction is undertaken to earn income, so it is an autonomous transaction whereas accomodating transaction is borrowing from the International Monetary Fund (IMF).

- Autonomous transactions are also called “above the line transactions” whereas accomodating transactions are called “below the line transactions” in the BoP.
- A ‘deficit’ in the balance of payments occurs during the year when the autonomous inflow of foreign exchange is less than the autonomous outflow. So, BoP transactions which are undertaken to cover this deficit are known as “accomodating” transactions as they are meant to correct the BoP imbalance (deficit) autonomous items/transactions are the cause of BoP imbalance (deficit) and accomodating transactions help to correct this deficit.

24. (a) False, because value of investment multiplier does not vary between 0 and infinity but varies from 1 to infinity (∞).

This can be proved by

- When $MPC = 0$, then $k = \frac{1}{1-MPC} = \frac{1}{1-0} = \frac{1}{1} = 1$
- When $MPC = 1$, then $k = \frac{1}{1-MPC} = \frac{1}{1-1} = \frac{1}{0} = \infty$

- (b) True, there is an inverse relationship between the value of MPS and Investment multiplier. We know that higher the value of MPS, the lower is the value of multiplier and vice-versa.

$$k = \frac{1}{MPS}$$

For example, If $MPS = 0.10$, then $k = \frac{1}{MPS} = \frac{1}{0.10} = 10$

- (c) True, as the value of APS can never be greater than 1, in fact it can never be equal to 1, as $APC + APS = 1$.

Note: If $APS = 1$, then APC is zero which is not possible, therefore, some minimum level of consumption expenditure is always required for survival.

So, value of APS can be zero or negative but never greater than 1 as stated.