

1. Define scarcity and choice.

- ✍ Scarcity and choice are two fundamental concepts in economics. Scarcity refers to the situation in which demand for a commodity is more than its supply. Choice is the decision-making process involved in allocating these resources, based on the principle of opportunity cost.

2. Distinguish between firm and industry.

✍

Firm	Industry
1. Firm is an individual producing unit of the industry.	Industry is a group of firms producing homogeneous products.
2. A firm is a price-taker, not a price maker. It follows the price determined by the industry.	An industry determines price at the intersecting point of demand and supply curves.

3. Define monetary policy.

- ✍ Monetary policy is the set of actions taken by a central bank to control the money supply and interest rates with the goal of stabilizing prices, promoting full employment, and supporting economic growth.

4. What are the sources of government borrowing?

- ✍ The sources of government borrowing are:

A. Internal Borrowings

1. Borrowing from individuals
2. Borrowing from non-banking financial institutions.
3. Borrowing from commercial bank
4. Borrowing from central bank

B. External Borrowing

1. International Financial Institutions
2. Foreign Governments

5. Define Human Development Index

- ✍ Human Development Index (HDI) is a statistical measure of a country's overall achievement in terms of life expectancy, education, and per capita income. It is used to rank countries into four tiers of human development and is used as an indicator of a country's overall progress and standard of living.

6. State the major objectives of WTO

- ✍ The objectives of WTO are as follows:
- a. Raising the standard of living and incomes,
 - b. Promoting full employment
 - c. Expanding production and trade
 - d. Optimum utilization of world's resources
 - e. Introducing sustainable development

7. Define development planning.

- ✗ Development planning is defined as deliberate government attempts to implement, monitor, supervise and coordinate economic decisions made on economic issues of a nation. It is also known as the economic planning of a country.

8. Define decent work according to UN.

- ✗ Decent work, according to the United Nations, refers to a job that provides fair wages, safe working conditions, and the opportunity for workers to advance and improve their skills and opportunities.

9. State the major functions of statistics.

- ✗ The major functions of statistics are as follows:
1. Statistics Simplifies Complexity
 2. Statistics Presents Facts in Figure
 3. Statistics facilitates Comparison
 4. Statistics helps in forecasting

10. Define primary data.

- ✗ Primary data refers to data that is collected and recorded for the first time. This type of data is not available from any other source and is gathered through various methods such as surveys, questionnaires, experiments, and direct observations.

11. From the following hypothetical data calculate average marks.

Subject	English	Nepali	Accountancy	Economics	Maths	Computer
Marks	14	12	18	17	20	15

Solution:

$$\text{Given, } \sum X = 14 + 12 + 18 + 17 + 20 + 15 = 96$$

$$\text{and } n = 6$$

$$\text{We know that average marks } (\bar{X}) = \frac{\sum X}{n} = \frac{96}{6} = 16$$

Group 'B'

Short Answer Questions

8×5 = 40

12. Describe the concept of production possibility curve.

- ✗ Production possibility curve (PPC) is a graphical illustration of all the possible combinations of goods and services that an economy can produce with the full employment of available resources, within a specific time period. PPC is also referred to as production possibility frontier or product transformation curve.

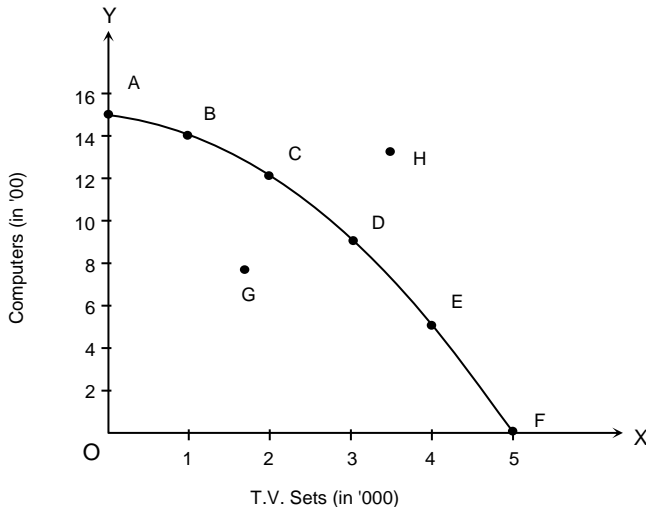
Assumptions:

The following are the assumptions of PPC:

1. The economy is producing only two goods.
2. There is full employment of resources.
3. There is no change in state of technology.
4. Resources and time period are given.

On the basis of these assumptions, the concept of PPC can be explained with the help of the following table and diagram:

Combinations	TV sets	Computers	Opportunity Cost
A	0	15	-
B	1	14	1
C	2	12	2
D	3	9	3
E	4	5	4
F	5	0	5



In the figure, the units of T.V. sets and computers are measured on the x-axis and y-axis respectively. Points A, B, C, D, E and F represent different combinations of T.V. sets and computers. By combining all these points, we get the curve AF. It is known as the Production Possibility Curve.

The economy cannot choose a point outside the PPC (say, H) which requires more resources or improved technology. This may not be possible in the short-run. On the other hand, the economy may produce a combination represented by G. But at this point, its resource will remain unutilized. Hence, it has to choose a point on the PPC.

12 or Explain the features of Mixed Economy.

✂ A mixed economy is a type of economic system that combines elements of both a market economy and a planned economy. It is characterized by the following features:

- 1. Private and public ownership:** A mixed economy allows for both private and public ownership of the means of production. This means that some industries are owned and operated by the government, while others are owned and operated by private individuals or corporations.
- 2. Market mechanism:** A mixed economy operates on the principle of supply and demand, with prices being determined by market forces. However, the government can intervene in certain markets to regulate prices or ensure that certain goods and services are available to the public.

3. **Regulation:** A mixed economy is regulated by the government, which sets rules and regulations to ensure that the economy operates in a fair and efficient manner.
4. **Competition:** A mixed economy encourages competition between businesses, which can lead to lower prices, better quality products, and more efficient production methods.
5. **Social welfare programs:** A mixed economy provides a safety net for its citizens through various social welfare programs, such as unemployment benefits, healthcare, and retirement benefits.

In conclusion, a mixed economy combines the benefits of a market economy with the stability and security provided by government intervention, aiming to create a balanced and sustainable economic system.

13. Consider the following table and answer the questions given below.

Level of output	TFC	TVC	TC
0	20	0	-
1	-	15	-
2	-	24	-
3	-	30	-
4	-	40	-
5	-	55	-
6	-	90	-

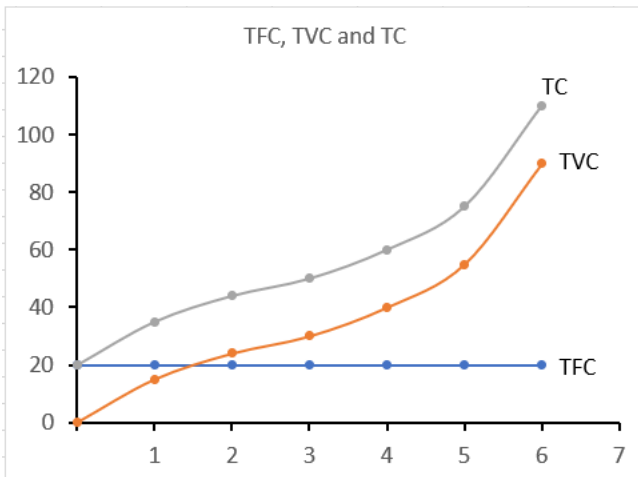
- a. Complete the given table.
- b. Draw the TFC, TVC and TC curves.
- c. State the nature of TFC, TVC and TC curves.

Solution:

- a. The given table can be completed as follows:

Level of output	TFC	TVC	TC
0	20	0	20
1	20	15	35
2	20	24	44
3	20	30	50
4	20	40	60
5	20	55	75
6	20	90	110

- b. Derivation of TFC, TVC and TC curves



c. Natures of TFC, TVC and TC curves.

TFC Curve

TFC curve is parallel to the x-axis because the total fixed cost remains regardless of output level. This curve starts from a point on the y-axis, implying that TFC will be incurred even if the output is zero.

TVC Curve

TVC curve slopes upward, implying that TVC increases with the increase in output. It starts from the origin because $TVC = 0$ when $Q = 0$. This curve is inversely S-shaped.

TC Curve

TC curve is derived from the vertical summation of TFC and TVC. Since $TC = TFC + TVC$, both TC curve and TVC curve have the same slope i.e., they are inversely s-shaped, and the vertical gap between them is always the same.

14. Explain the equilibrium of firm under perfect competition market by using both TR-TC and MR-MC approach.

A firm is in equilibrium when it maximizes its profit. There are two methods for the determination of the equilibrium of a firm. They are:

1. Total Revenue and Total Cost Approach (TR-TC Approach)
2. Marginal Revenue and Marginal Cost Approach (MR-MC Approach)

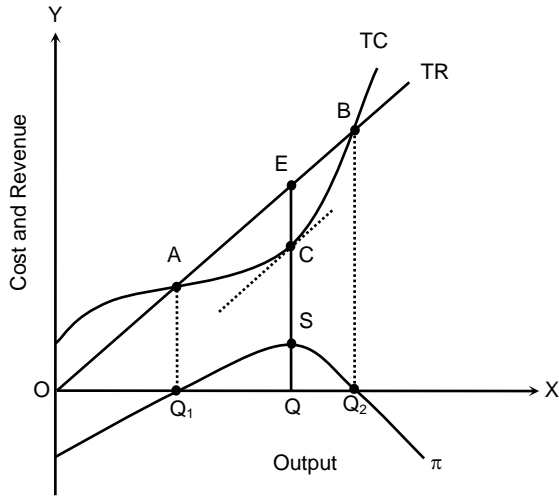
Total Revenue (TR) and Total Cost (TC) Approach

Here, total profit (π) is the difference between total revenue (TR) and total cost (TC).

i.e. $\pi = TR - TC$

In this approach, a firm is said to be in equilibrium when the gap between total revenue (TR) and total cost (TC) is the maximum i.e., the profit (π) is maximum.

The equilibrium condition of a firm under this approach can be explained by the help of the following figure:



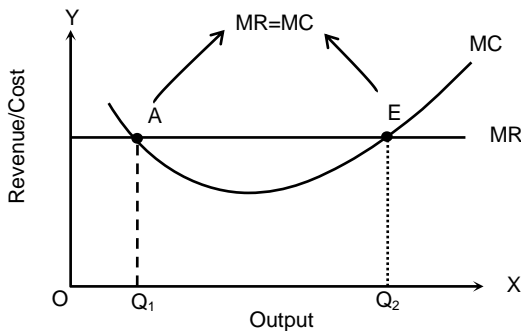
In the figure, the firm faces loss if the output is less than OQ_1 or more than OQ_2 . Points A and B are break-even points where profit is zero. In order to find maximum profit, a tangent line is drawn to the TC curve. When this tangent line is parallel to TR curve, the profit is the maximum. Therefore, OQ is the equilibrium level of output of the firm where the vertical distance between TR and TC curves is the maximum.

Marginal Revenue (MR) and Marginal Cost (MC) Approach

Under this approach, a firm will be in equilibrium the following two conditions are fulfilled.

1. $MC = MR$
2. MC curve cuts MR curve from below,

The equilibrium condition of a firm under this approach is shown in the following figure:



In the figure, the firm can maximize its profit at point E where $MC = MR$ and MC curve cuts MR curve from below. So, the firm can maximize its profit by producing OQ_2 level of output.

15. Explain the wage fund theory of wage.

✎ The wage fund theory was propounded by Adam Smith and developed by J.S. Mill. This theory states that a fixed proportion of the capital stock is allocated for the payment of wages. This proportion is known as the wages fund. The ratio of the wages fund to the number of workers determines the level of wages at any given time. Therefore, level of wages depends on two quantities:

- a. The wages fund; and
- b. The number of workers willing to work.

Hence, the level of wages can be obtained simply by dividing the wages fund by the number of workers. That is,

$$\text{Level of wage} = \frac{\text{Wages Fund}}{\text{Number of Workers}}$$

This shows the direct relationship between the wage fund and the level of wages, and the inverse relationship between the number of workers and the level of wages. It means that the level of wages increases only when there is an increase in wages fund or a decrease in the number of workers. As the wage fund remains fixed, if the workers want to increase the rate of wages, they must restrict the number of their children.

According to this theory, the attempts made through trade union activity are useless. If workers in a section of industry managed to get an increase in wages by trade union activity, workers employed in other firms would be affected. In other words, wages fund being fixed, if any group of labourers want to increase their wages, the other labourers would get less. So, the only way to increase their wages is to control the population.

16. Describe the function of the central bank.

✎ Central bank is an apex bank that controls and regulates the entire banking system of a country. The various functions performed by the central bank are:

1. **Monopoly of note issue:** Central bank has monopoly rights of issuing notes. This right has been given to the Central Bank in order to ensure uniformity in the currency and to secure control over currency system.
2. **Banker to the Government:** Central bank is a banker, agent, and financial adviser to the government. It manages the account of the government, it buys and sells the securities of the government and it frames policies to regulate the money market.
3. **Bankers' Bank:** The Central Bank is also the bankers' bank. It accepts deposits from the commercial banks, and offers them loan. In every country, the Central Bank is empowered to supervise the working of the member banks.
4. **Lender of last resort:** When the commercial banks are facing a liquidity crunch or any type of insolvency, the central bank is the last resort to provide loans against treasury bills, government securities, and bills of exchange.
5. **Custodian of foreign currency:** The central bank maintains a minimum reserve of international currency all the time in order to meet emergency requirements of foreign exchange.
6. **Control of credit:** The central bank has power to regulate credit creation by commercial banks. The credit creation depends upon the amount of deposits, cash

reserves, and rate of interest given by commercial banks. All these are directly or indirectly controlled by the central bank.

- 7. Clearing House Function:** The Central bank acts as a clearinghouse for member banks. As all banks have their accounts with the Central Bank, simple transfer from and to their accounts settles the claims of banks against one another.
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17. Suggest some remedial measures to achieve high level of employment in Nepal.

✎ To achieve a high level of employment in Nepal, the government should take the following remedial measures:

- 1. Promote Small and Medium Enterprises:** Small and medium enterprises (SMEs) are the backbone of any economy. The government should provide tax incentives, subsidies, and other facilities to promote SMEs in the country. This will create job opportunities for a large number of people, especially in rural areas.
- 2. Develop Infrastructure:** Infrastructure development is crucial for economic growth and job creation. The government should focus on developing physical infrastructure such as roads, bridges, and airports, and social infrastructure such as education and health care. Infrastructure development will create job opportunities in the construction and other related sectors.
- 3. Promote Skill Development:** The government should promote skill development by providing vocational training to young people. This will increase their employability and help them find suitable jobs. Skill development should be aligned with the needs of the industry to ensure that the workforce is job-ready.
- 4. Encourage Foreign Investment:** Foreign investment can play a significant role in creating job opportunities in Nepal. The government should provide a favorable investment climate by reducing bureaucratic hurdles, ensuring ease of doing business, and providing tax incentives to foreign investors.
- 5. Emphasize Tourism Industry:** Nepal has enormous potential in the tourism industry. The government should emphasize the development of tourism infrastructure and promote tourism to attract more visitors to the country. This will create job opportunities in the hospitality and tourism sectors.

In conclusion, achieving high levels of employment in Nepal requires a comprehensive strategy that focuses on developing physical and social infrastructure, promoting SMEs, skill development, foreign investment, and emphasizing the tourism industry.

18. Discuss about the process of plan formulation.

✎ The process of plan formulation is explained below:

- 1. Evaluation of past plans:** The first step in plan formulation is to evaluate past plans to gain insights and make predictions for the new plan.
- 2. Collection of new project proposals:** The planning authority collects project proposals from each district and various government offices.
- 3. Discussion:** Key stakeholders such as National Development Council, NPC, Ministries, and experts hold discussions to shape the new plan.

4. **Objectives, targets, and priorities:** The development plan should determine its objectives, targets, growth rates, and priorities in various fields of the economy.
5. **Authorization and implementation:** The final document of the development plan is presented to National Development Council for authorization, and then implemented with the support of various stakeholders.
6. **Monitoring and Evaluation:** NPC regularly monitors and evaluates the success or failure of the plan to determine if it meets its objectives and targets.

19. Calculate the value of standard deviation and interpret the result.

Class	0-10	20-30	20-30	30-40	40-50	50-60	60-70	70-80
frequency	8	12	10	5	8	6	5	2

Solution: Calculation of standard deviation

Class	Mid-value (x)	f	fx	fx ²
0-10	5	8	40	200
10-20	15	12	180	2700
20-30	25	10	250	6250
30-40	35	5	175	6125
40-50	45	8	360	16200
50-60	55	6	330	18150
60-70	65	5	325	21125
70-80	75	2	150	11250
		N = 56	∑fx = 1810	∑fx ² = 82000

Here, Mean $\bar{X} = \frac{\sum fX}{N} = \frac{1810}{56} = 32.32$

$$\text{Standard Deviation } (\sigma) = \sqrt{\frac{\sum fX^2}{N} - \left(\frac{\sum fX}{N}\right)^2}$$

$$= 20.48$$

Interpretation: Here, $\sigma = 20.48$. It means the average deviation of the data from the mean value (32.32) is 20.48.

Q19 or

Calculate price index number from following by using Laspeyre's and Paasche's formula and interpret the results.

Commodity	Base Year 2015		Current Year 2020	
	Price (Rs.)	Quantity (Kg)	Price (Rs.)	Quantity (Kg)
E	15	50	20	60
F	10	30	12	40
G	12	40	15	45
H	25	20	30	25
I	20	25	25	30

Solution: Calculation of the Laspeyre's and Paasche's price index from the given data.

Commodity	P ₀	Q ₀	P ₁	Q ₁	P ₁ Q ₀	P ₀ Q ₀
A	10	25	12	30	300	250
B	15	30	20	40	600	450
C	12	40	15	50	600	480
D	20	30	20	35	600	600
E	25	10	30	15	300	250
					ΣP₁Q₀ =2400	ΣP₀Q₀ = 2030

We know that,

Laspeyre's Price Index is

$$\begin{aligned}
 P_{01}(L) &= \frac{\sum p_1 q_0}{\sum p_0 q_0} \times 100 \\
 &= \frac{2400}{2030} \times 100 \\
 &= 118.227
 \end{aligned}$$

Interpretation: There has been rise in general price level by 18.227% in comparison to the base year 2015.

Group 'C'

Long Answer Questions

3×8 = 24

20. How equilibrium price and output are determined in short-run by a firm using MR-MC approach under monopoly? Explain.

✗ Monopoly is a market situation characterized by the existence of only one seller of the product having no close substitutes.

Under monopoly, there is no difference between firm and industry. The firm can adjust price as well as output. The firm is a price-maker. But given the downward sloping demand curve, the monopolist can sell more only at lower prices. For determining the equilibrium level of output a firm must satisfy the following two conditions:

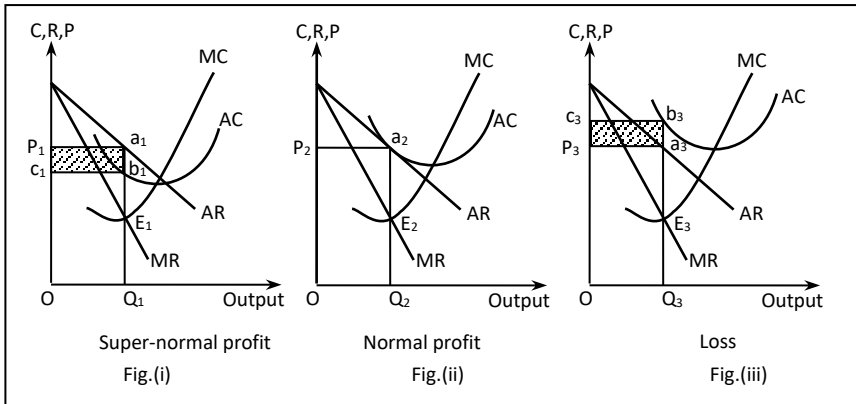
- (i) MC = MR, and
- (ii) MC must cut MR from below.

Short-run equilibrium of a firm:

In the short-run, equilibrium of the firm does not necessarily mean that it makes excess profits. Whether the firm makes excess profit, normal profit or loss depends on the level of the AC at the short-run equilibrium. These three cases are:

1. If AR = AC; the firm receives normal profit
2. If AR > AC; the firm receives excess profit
3. If AR < AC; The firm faces loss situation.

Diagrammatic Representation



These figures are explained below:

- Excess Profit:** In the figure (i), E₁ is the equilibrium point where there is MC = MR and MC cuts MR from below. At this point,
 Equilibrium output (Q) = OQ₁
 Average revenue (AR) = a₁Q₁
 Average cost (AC) = b₁Q₁
 Here, AR > AC
 ∴ This is the situation of super normal profit. The area Pa₁b₁c₁ (shaded area) is the total profit.
- Normal Profit:** In the figure (ii), E₂ is the equilibrium point where there is MC = MR and MC cuts MR from below. At this point,
 Equilibrium output (Q) = OQ₂
 Average revenue (AR) = a₂Q₂
 Average cost (AC) = a₂Q₂
 Here, AR = AC
 ∴ This is the situation of normal profit.
- Loss:** In the figure (iii), E₃ is the equilibrium point where there is MC = MR and MC cuts MR from below. At this point,
 Equilibrium output (Q) = OQ₃
 Average revenue (AR) = a₃Q₃
 Average cost (AC) = b₃Q₃
 Here, AR < AC
 ∴ This is the situation of loss. The area PE₃b₃c₃ (shaded area) is the total loss.

21. Define direct tax. Explain its merits and demerits.

- ✗ Direct taxes are taxes that are paid by the person on whom they are levied and cannot be shifted to anyone else. Examples include income tax, wealth tax, and gift tax. The impact and incidence of a direct tax fall on the same person.

Advantages of Direct Taxes

Following are the main advantages of direct taxes.

1. **Economical:** Direct taxes are economical. The cost of collecting direct taxes is very low as these taxes are usually collected at the sources. For example, income tax is deducted every month from the salary of a person. This saves both time and expenses for the tax-collecting officials.
2. **Equitable:** Direct taxes help to reduce income and wealth inequalities in society by transferring wealth from the rich to the poor.
3. **Elastic:** Direct taxes are elastic because the government can obtain more yields from them with every increase in tax rates.
4. **Certain:** A direct tax confirms the principle of certainty. On the one hand, the taxpayers are certain as to how much they are expected to pay; and on the other hand, the government can estimate properly the yields from the direct taxes and can adjust its income and expenditure.

Disadvantages of Direct Taxes

Following are the disadvantages of direct taxes:

1. **Inconvenient:** The great disadvantage of a direct tax is that it pinches the payer. He 'squeaks' when a lump sum is taken out of his pocket. Direct taxes are thus very inconvenient to pay.
2. **Tax Evasion:** Direct taxes can lead to tax evasion as some individuals and organizations may under-report their income or hide their wealth to avoid paying taxes.
3. **Not suitable to Underdeveloped Countries:** Direct taxes are not suitable for Underdeveloped countries like Nepal, where the majority of people are below the absolute poverty line.
4. **Disincentive for Savings:** Direct taxes discourage savings as they reduce disposable income, which can negatively impact investments.

21 or Explain the comparative cost advantage theory of foreign trade.

- ✗ The theory of comparative cost is the basis of international trade. It was developed by the famous classical economist **David Ricardo**. According to this theory, all the countries in the world do not have same resources. Due to differences in climate, availability of natural resources, geographical situation and efficiency of labour, a country can produce one commodity at a lower cost than the other can. Therefore, a country should produce and export those commodities in which it has comparative cost advantage and import those commodities in which it has comparative cost disadvantage.

Assumptions of the Theory

1. There are only two countries and two commodities.
2. Labour is the only factor of production and hence production costs mean labour cost only.
3. All the units of labour are homogeneous.
4. Labour is perfectly mobile within the country but perfectly immobile between countries.
5. International trade is free from all kinds of barriers.
6. There is no transport cost.
7. Commodities are produced under the law of constant costs or returns.

Given these assumptions, this theory is explained with the help of following table.

Per Unit Labour Cost (Labour Hours)

Country	Tea	Cloth
Nepal	20	40
India	30	50

As the table shows, Nepal can produce both the goods more efficiently i.e., at a lower cost compared to India. But Nepal would benefit more by producing Tea and exporting it to India because it possesses greater comparative advantages in it. This is because the comparative cost ratio of Tea ($20/30 = 0.67$) is less than that of cloth ($40/50 = 0.80$). On the other hand, India has comparative advantage in cloth because the comparative cost ratio of production of cloth ($50/40 = 1.25$) is less than that of tea ($30/20 = 1.50$). Thus, trade is beneficial to both the countries. The gain from international trade can also be shown from the following table.

Domestic Exchange Ratio

Nepal	India
Tea : cloth 1 : 0.5 2 : 1	Tea : cloth 1 : 0.6 1.67 : 1

The table shows that the domestic exchange ratio in Nepal is 1 unit of tea = 0.5 units of cloth, and in India 1 unit of tea = 0.6 units of cloth. Thus, by exporting 1 unit of tea to India, Nepal can obtain 0.6 units of cloth. Similarly, by exporting 1 unit of cloth to Nepal, India can get 2 units of tea. Thus, both the countries gain through trade and can increase the consumption of two commodities.

Criticism

As with many other economic ideas, there are criticisms to be leveled at this theory.

1. **Complicated:** It is much more complicated in the real world in deciding in which goods countries have a comparative cost advantage. This is because there are a large number of goods and many countries.
2. **Unrealistic:** This theory is highly unrealistic because this theory is based on several unrealistic assumptions such as labour is only factor of production, homogeneous labour, no transport cost, no barrier, perfect mobility of factors of production etc.

3. **Complete specialization is not possible:** Complete specialization is not possible in the following cases: (i) relating to a big country and a small country; and (ii) relating to a commodity of high value and low value.
 4. **Ignores Demand Side:** This theory considers only the supply side and ignores the demand side. Because it suggests that two countries will trade their products between them if there is comparative cost advantage.
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22. Describe the positive and negative impacts of foreign employment in Nepal.

✎ Here are some of the positive and negative impacts of foreign employment in Nepal:

Positive impacts:

1. **Increased remittances:** One of the most significant positive impacts of foreign employment in Nepal is the increase in remittances. Remittances are the money that foreign workers send back to their families in Nepal. This money has become an important source of income for many households in Nepal, helping to improve their standard of living.
2. **Reduced unemployment:** Foreign employment has also helped to reduce unemployment in Nepal. Many Nepali citizens who were previously unemployed have been able to find work abroad, which has helped to improve their economic situation.
3. **Skill development:** Many Nepali workers acquire new skills and knowledge while working abroad, which can help them secure better-paying jobs when they return to Nepal. This, in turn, can help to boost Nepal's economy.
4. **Improved living standards:** With the increase in remittances, many Nepali families have been able to afford better healthcare, education, and other basic necessities, leading to improved living standards.

Negative impacts:

1. **Brain drain:** One of the most significant negative impacts of foreign employment in Nepal is the "brain drain" that results when skilled workers leave the country to work abroad. This can create a shortage of skilled labor in Nepal, making it more difficult for the country to develop.
2. **Exploitation:** Many Nepali workers who go abroad for work face exploitation and abuse from their employers, leading to poor working conditions and a lack of basic human rights.
3. **Social problems:** The absence of a family member can create social problems, including psychological distress, marital problems, and social isolation.
4. **Dependency:** Nepal's economy has become heavily dependent on remittances, which can create a false sense of security and hinder the development of other sectors of the economy.

In conclusion, while foreign employment has brought some positive impacts to Nepal, it has also brought negative impacts, and it is important for the government and other stakeholders to address these challenges to ensure that the benefits of foreign employment outweigh the costs.