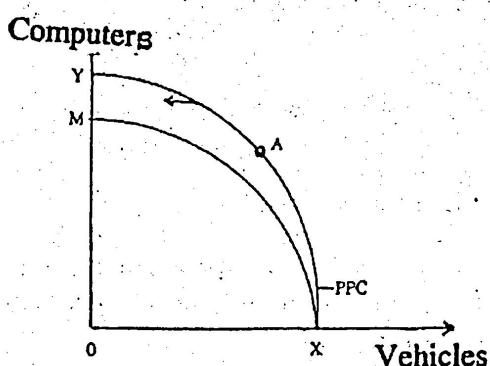


**2004 – ECONOMICS - I / Part -I**

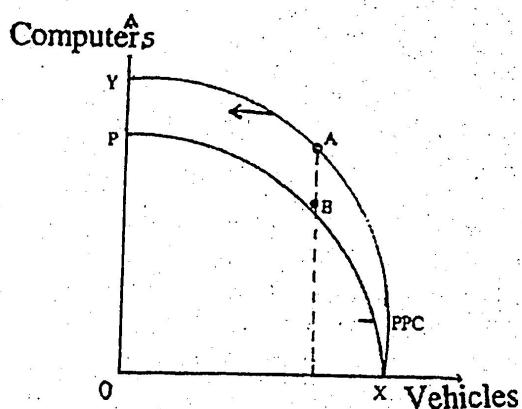
1.(iv)	5.(i)	9. (i)	13.(iii)	17.(v)
2.(iii)	6.(iii)	10.(iii)	14.(v)	18.(iv)
3.(i)	7.(iv)	11.(iv)	15.(v)	19.(i)
4.(ii)	8.(ii)	12.(iv)	16.(iii)	20.(ii)

**2004 – ECONOMICS - I / Part -II**

1. (i) XY is the original PPC. Production possibility falls in the computer industry as a result of net migration of skilled computer workers. Hence PPC curve will shift to the left from the vertical axis only. New PPC will be shown as XM.

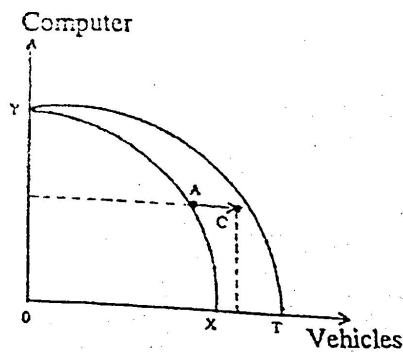


- (ii). XY is the original PPC, XP curve shows the fall of employee productivity in the computer industry. There should not be any change in employment in both industries after the fall in productivity. This is depicted by shifting the production point from A to B. Production possibility curve should shift to the left from vertical axis because of the fall in productivity in that industry. Since there is no change in employment level in any industry, automobile production should remain at the previous level and computer production should fall than did earlier. This is shown by point B.

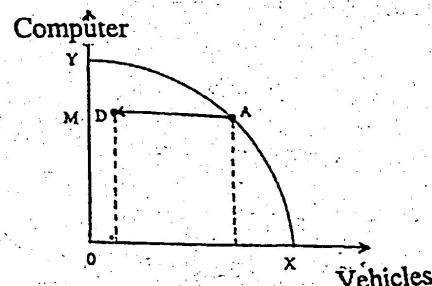


- (iii.) PPC curve will shift to the right as YT Because of the improvement in technology used in automobile industry. Even though technology is improved in the automobile industry new product combination cannot lie on the YT curve because of the unemployment caused by the technological improvement in that sector. Any point on the PPC Curve will show full employment situation.

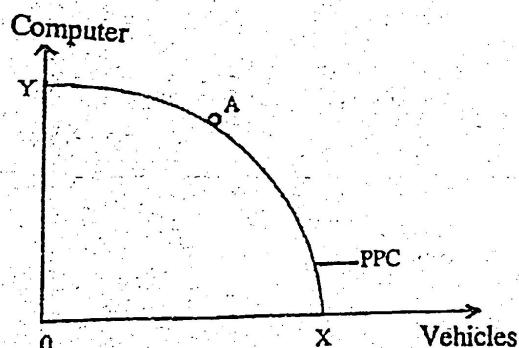
Hence, when showing the new product combination, computer production should remain at the previous level and automobile production should increase but the point should lie between the new curve and the original curve. That is point C.



- (iv). To show unemployment caused in the automobile industry due to a fall in demand, product combination A should be shifted to its left to D. New product combination will be D. Less motor vehicles will be produced when demand falls. There is no impact (positive or negative) on computer production.



- (v). There is no change in production level though demand changes. Since there is no change in employment level in both industries subsequent to the change in demand (increased demand for computers and decreased demand for automobiles) product combination will remain at the original point without any change. That is depicted by point A.



- (2) (i) Relevant information is provided to economic agents such as producers and households to make correct decision.

- (a) Information Function
- (b) Incentive Function
- (c) Rationing Function

**(ii). Advantages:**

- Ensuring adequate resource allocation on the provision of public goods.
- Production process will function smoothly due to proper planning and their ability to control the mobility of all the resources including labour.
- It has the ability to eliminate the inefficiencies arising from competition.
- Production is done in the interest of the society rather than for private benefits.
- No exploitation to be seen as in the price system.
- It is possible to plan the distribution of production in such a way that disparity in distribution of income is reduced.
- Due attention is given on externalities in making decisions on what to produce and how to produce.

**Disadvantages.**

- It is difficult to find necessary information to implement a good planning system.
- Disequilibrium such as stock accumulations
- No proper coordination

- No innovations due to lack of incentives
  - No freedom of choice and sovereignty
  - Shortage of goods due to inaccurate predictions and estimates on demand conditions
  - Inefficiency resulting from bureaucracy.
- iii Allocating resources on goods, which are not produced at all or insufficiently under market mechanism. (Public goods and merit goods)
- In order to eliminate inefficiencies arising in the allocation of resources due to externalities.
  - To provide infrastructure and to develop human resources.
  - To maintain macroeconomic stability
  - To preserve the environment to attain a sustainable growth
  - To set up a necessary legal framework in order to ensure an efficiency in market economy.
- iv Accounting profit is the difference between total revenue of a firm and its financial cost (= Expenditure on production factors hired from outside plus depreciation.)

Economic profit is the difference between the total revenue and the economic cost. Economic cost refers to the financial cost-plus opportunity cost.

(3.)	(i)	Equilibrium price before tax.	Rs. 6.00	Quantity 200
	(ii)	Equilibrium price after tax.	Rs. 8.00	Quantity 100
	(iii)	Rs. 2 x100	= Rs. 200 (Tax borne by the consumer)	
	(iv)	Total tax revenue Rs. 4 x 100	= Rs. 400	

(a)	Producer surplus before Tax	Equilibrium price Of the commodity	Minimum price at which the Commodity is sold In the market	Equilibrium x quantity
		=	2	$(6.00 - 2.00) \times 200 / 2 = 400/$

(b)	Producer Surplus After tax	$(8.00 - 6.00) \times 100 / 2 = 100 / =$ Rs.

(v)	Consumer surplus After Tax	Maximum price at which the Consumer is prepared to buy the product	Equilibrium Price	x Equilibrium Quantity
		=	2	
1.	Before tax			
	$(10.00 - 6.00) \times 200 / 2 =$	=	Rs. 100	
2.	After tax			
	$(10.00 - 8.00) \times 100 / 2 =$	=	Rs. 100	

- (4). i Percentage increase in demand =  $8\% / 4\% = 2.0$   
Percentage increase in income
- ii Percentage decrease in demand =  $-5\% / 25\% = -0.20$   
Percentage increase in price
- iii Percentage change in demand of X =  $-5\% / 1\% = -5.0$   
Percentage change in price Y
- iv Complementary good
- v Since the price elasticity is - 0.2, the demand is inelastic.

- (5). (i) (a) National Product under expenditure approach.

	Rs. Billion
Personal consumption	450
Government purchases	60
Gross investment	<u>100</u>
Gross domestic expenditure	610
(+) Exports (Goods and non factor services)	120
(-) Imports (Goods and non factor services)	<u>160</u>
Gross domestic product (GDP)	570
(+) Net foreign factor income	<u>030</u>

**Gross National Product (GNP)** 600

$$\begin{aligned}
 \text{GNP} &= \text{GDP} + F \\
 &= (C + I + G + X - M) + F \\
 &= (450 + 100 + 60 + 120 - 160) + 30 \\
 &= \text{Rs. 600 Billion}
 \end{aligned}$$

(b) Gross Domestic Product = Gross National Product - Net Foreign Factor Income

$$\begin{aligned}
 \text{GDP} &= 600 - 30 \text{ million Rupees} \\
 &= \text{Rs. 570 Billion} \\
 &= \text{GNP} - F \\
 &= 600 - 30 \\
 &= \text{Rs. 570 Billion}
 \end{aligned}$$

(c) Net Domestic Product = Domestic Incomes + Net Indirect Tax  

$$\begin{aligned}
 &\quad (\text{Wages} + \text{Net Interest} + \text{Profits} + \text{Rents}) + \text{Net Indirect Tax} \\
 &= (375 + 60 + 70 + 40) + 15 = 560 \\
 &= \text{Rs. 560 Billion}
 \end{aligned}$$

$$\begin{aligned}
 W &= \text{Wages} \\
 NR &= \text{Net Interest} \\
 J &= \text{Profits} \\
 U &= \text{Rents} \\
 NIT &= \text{Net Indirect Tax}
 \end{aligned}$$

(d) National Income = domestic Income + Net Foreign Factor Income

$$\begin{aligned}
 &= \text{Wages} + \text{Net Interests} + \text{Profits} + \text{Rents} + \text{Net Foreign Factor Income} \\
 &= 375 + 60 + 70 + 40 + 30 = 545 + 30 = 575 \text{ million rupees.}
 \end{aligned}$$

$$NI = DI + F = 545 + 30 = 575 \text{ million rupees.}$$

$$NI = \text{National Income}$$

$$DI = \text{Domestic Income}$$

(e) Disposable Personal Income = National Income + Transfer Payments - Personal Tax

$$\begin{aligned}
 &= 575 + 5 - 20 \\
 &= \text{Rs. 560 Billion}
 \end{aligned}$$

$\begin{aligned} \text{DPI} &= NI + Bp - Tp = 575 + 5 - 20 = 560 \\ \text{DPI} &= \text{Disposable Personal Income} \\ \text{NI} &= \text{National Income} \\ Bp &= \text{Transfers} \\ Tp &= \text{Personal Tax} \end{aligned}$

(ii) Amount of depreciation

1st Method

$$\text{Gross Domestic Product} = \text{National Income} + \text{Net Indirect Tax} + \text{Depreciation} \text{ (At market price)}$$

$$570 = 545 + 15 + X$$

$$X = 570 - 560 = 10 \text{ billion rupees}$$

$$\text{Depreciation} = \text{Rs. 10 Billion}$$

2nd Method

$$\begin{aligned}
 \text{Depreciation} &= \text{Gross Domestic Product} - \text{Net Domestic Product} \\
 &= 570 - 560 \\
 &= \text{Rs. 10 Billion}
 \end{aligned}$$

(iii) Samurdhi benefits

School uniform

Season Tickets for Students

School textbooks

Pensions

Flood and drought relief

Payments made of disabled soldiers

Maternal benefits

Concessions for refugees

(6) (i) When extra income is used only on consumption and savings addition of marginal propensity to consume and marginal propensity to save should be equal to 1.

$$\Delta Y = \Delta C + \Delta S$$

$$\text{Marginal Propensity to Consume} = \Delta C / \Delta Y = MPC$$

$$\text{Marginal Propensity to Save} = \Delta S / \Delta Y = MPS$$

$$\begin{aligned} MPC + MPS &= 1 \\ \Delta C / \Delta Y + \Delta S / \Delta Y &= 1 \\ 0.8 + 0.2 &= 1 \end{aligned}$$

- (ii) - Functions of a housewife  
     E.g.: - washing clothes, cleaning, cooking etc  
     - Productive economic activities that are linked to personal use only.  
     - Unreported business transactions.  
     E.g.: - Income earned by tuition providers, doctors, and lawyers)
- (iii) Injections have an expansionary effect on circular flow of income. That is injection strengthens the aggregate demand (Expenditure).  
     In an open economy injections are,  
     (1) Investments (I)  
     (2) Government expenditure on goods and services (G)  
     (3) Export expenditure (X)

Withdrawals weaken the aggregate demand (Expenditure) on domestic goods and service. In an open economy withdrawals are,

- (1) Savings (S)  
     (2) Net taxes (T)  
     (3) Imports (M)

- (iv) 1<sup>st</sup> round = Production (Income) increases by the same amount as in investment expenditure.  
 $= \Delta Y = \Delta I = \text{Rs. } 100 \text{ Billion}$

2<sup>nd</sup> round = Consumption expenditure increases. The production of consumer goods and income increases.  
 $= \text{increased income } \times 0.8 = 100 \times 0.8 = \text{Rs. } 80 \text{ Billion}$

3<sup>rd</sup> round = Increase in income of Rs. 80 Billion at the 2<sup>nd</sup> round will cause a further increase in demand for consumer goods and subsequently the income also rises due to increased production of consumer goods.  
 $= \Delta Y = 80 \times 0.8 = \text{Rs. } 64 \text{ Billion}$

4<sup>th</sup> round = Increased income Rs. 64 Billion at the 3<sup>rd</sup> round results in an increase in demand for consumer goods and subsequently the income due to the increase in production of consumer goods.  
 $= \Delta Y = 64 \times 0.8 = \text{Rs. } 51.2 \text{ Billion}$

- (7.) (i) Externalities are benefits and costs, which are accrued and imposed on parties who are not directly involved with a certain production or consumption activity. In other words externalities are situation where a third party is affected, negatively or positively, by the Externalities are 4 types.
- (1) Positive externalities in relation to production.  
     (2) Negative externalities in relation to production.  
     (3) Positive externalities in relation to consumption.  
     (4) Negative externalities in relation to consumption.
- (ii) Private cost is the cost incurred by the party performing a certain production or consumption activity.
- (iii) That cost is directly and personally borne by the party performing that action.  
     Social cost is imposed on the whole society by a certain economic activity. (Production or consumption). Social cost comprises of costs of the party carrying out that activity but the cost is imposed on external parties who are not directly involved in that activity.

They are both private cost and external cost. Hence, Social Cost = Private Cost + External Cost

- (iii) - Education  
     - Healthcare service  
     - Charity services  
     - Personal hygienic habits  
     - Bee keeping  
     - Technical training given to employees by a firm  
     - Educational programmes on T.V.

(iv)

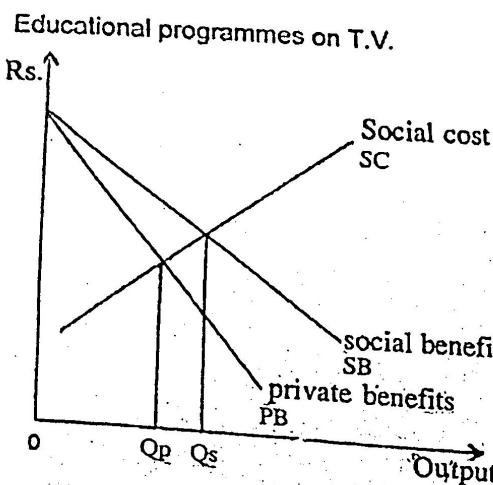


Figure 1

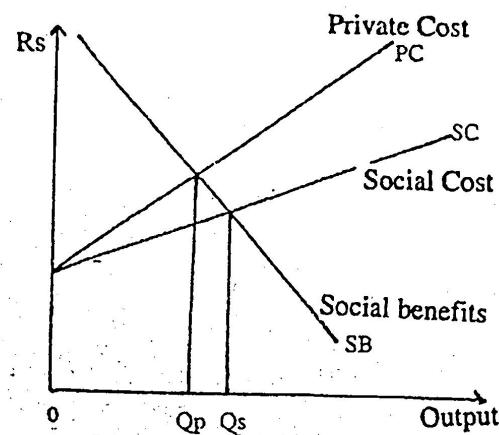


Figure 2

Figure 1 above shows how private and social benefits due to consumption are determined. Social benefits are greater than private benefits in a production process, which generates external benefits in relation to consumption.

Figure 2 shows that social costs are less than private costs in relation to production.  $Q_p$  is the equilibrium output level decided by the market force.  $Q_s$  is the socially effective output level (optimum level or socially desirable level).

- (8). (i) (a) Inefficient collection of government revenue.  
Reduced tax revenue due to various tax reliefs and concessions.  
Delay in the implementation of projects which generate extra income to the government.  
Public enterprises failing to earn profits due to inefficiencies.
- (b)- Government expenditure increasing rapidly.  
- Increasing defence expenditure.  
- Increasing expenditure on loan repayments.  
- Increasing interest payments.  
- Government transfer payments are inelastic and are at a higher level.  
- Cost of civil services increased.  
- Expenses associated with elections.
- (ii) Increasing budget deficit causes an increase in aggregate expenditure and accordingly occurring inflationary pressure.  
Adverse effect on Balance of Payment due to increased aggregate expenditure.  
Interest rate rises due to the use of domestic sources to finance the budget deficit.  
Crowding out effect. This shows the possibility that an increase in one form of spending may cause another form to fall. (If private investors are affected by increased government debt, a rise in public works might scare off private investment.)  
Taking more foreign loans can affect badly on the country's credit worthiness.  
External value of the domestic currency can get depreciated.  
Domestic savings ratio will get affected.  
Macro economic instability created from the huge budget deficit can harm the growth process of the country.  
Real exchange rate can increase due to domestic inflation and it will affect the international competition adversely.
- (iii) - Financial Management Act was passed in 2002.  
- Government suspended the requirement to the public sector.  
- Passing Welfare Benefit Act.  
- Limiting the government investments.  
- Introducing zero based budgeting system.  
- Restructuring the pension schemes.  
- Reforming public enterprise to enhance the efficiency (Restructuring, Privatisation).  
- Restructuring Government Pension System.

(1) v	(5) i	(9) ii	(13) v	(17) ii
(2) ii	(6) iv	(10) ii	(14) ii	(18) iv
(3) ii	(7) ii	(11) iii	(15) iii	(19) iv
(4) i	(8) ii	(12) v	(16) ii	(20) ii

2004 - ECONOMICS - II / Part -II

Excess reserves	=	Rs. 50,000 – 20,000
	=	Rs. 30,000 Million

(iii) Since it is just one bank operating in the banking maximum amount of credit it can create depends on the excess reserves it has. This bank has an excess reserve of Rs. 30,000 Million and the maximum amount it can lend is Rs. 30,000 Million.

Or  
It is equally acceptable if the candidate has put Rs. 175,000 after considering the current loan amount of Rs. 145,000 also. (Rs. 145,000 + 30,000)

(iv) When the amount of credit is increased by Rs. 30,000 Million, assets of the bank go up by Rs. 30,000 Million due to the rise in loans by that amount. Demand deposits shown under liabilities will also go up simultaneously by Rs. 30,000 Million. Accordingly the balance sheet of the Bank changes as follows.

1 <sup>st</sup> Method		<u>Balance Sheet</u>	
Liabilities		Assets	
Demand Deposits	Rs. Million	Reserves	Rs. Million
Capital	230,000	Securities	50,000
Total	50,000	Loans	55,000
	280,000		175,000
			280,000

#### 2<sup>nd</sup> Method

When borrowers deposit their money in other Commercial Banks or if they use that money to effect payments to those who deal with other banks the balance sheet of this bank will change further. In that case both reserves and demand deposits will fall by Rs. 30,000 Million. Then the balance sheet of the bank will be as follows.

#### Balance Sheet

	Rs. Million		Rs. Million
Demand Deposits	200,000	Reserves	20,000
Capital	50,000	Securities	55,000
Total	250,000	Loans	145,000
			250,000

(v) When the reserve ratio is increased up to 20% the bank should keep Rs. 40,000 Million as cash reserves. ( $20/100 \times 200,000$ ) still the bank is left with excess reserves of Rs. 10,000 Million. Therefore the bank is in a position to extend loans up to Rs. 10,000 Million. Please note that the extent of loans that can be created by a single bank is limited to the excess reserves that they hold. But when all the banks get together the amount of credit / loans that they create is higher than this due to the multiplier effect. (credit multiplier)

$$\text{Excess Reserve} = \text{Existing Reserve} - \text{Reserve required on deposit}$$

- (3). (i) - It gives an opportunity to experience specialization and economics of scale for countries and it stimulates the long-term economic growth.  
- More room for trade due to comparative advantage caused by specialization and economic of scale.  
- Opportunity to exchange new technology.  
- Non-economic benefits such as regional protection control of migrants etc.  
- Resources can be utilized more effectively and efficiently than earlier. That is resources will be switched from inefficient industries, which cannot face the companies to more efficient industries.

- (ii) - Export structure had shifted from agricultural products to industrial products.

Export category	1997	2002	2003
Agricultural exports	79%	20%	19%
Industrial exports	14%	77%	77%
Mineral exports	5%	2%	2%
Unclassified exports	2%	1%	2%

- Contributions from textiles and garments had outweighed that of Tea.  
- Export diversification due to the entrants of many new products such as ceramic products, rubber products, leather products, and jewellery etc.

- (iii) - Poor infrastructure facilities (frequent power failure, fluctuating voltage)  
- Bad management in manufacturing firms. Weak quality control procedures, marketing

- strategies, employees training and motivation.
- Inadequate research and development.
  - Macro economic instability.
  - Unfavourable union activities.
  - Ineffective financial intermediation.  
E.g.: - Higher interest rates.
  - Limitations in the legal framework.
- (iv) - Establishing macroeconomic stability in the country.
- Improving infrastructure facilities.
  - Reducing interest rates.
  - Increasing investments in education and training.
  - Providing subsidies to promote research and development.
  - Tax relieves and concessions to promote technology.
  - Good governance and efficient civil / public service.
  - Expanding markets by forming trade agreements.
- (4.) (i) - Real exchange rate is the nominal exchange rate, which is adjusted for inflation rate differences between the two countries.
- Real Exchange Rate = 
$$\frac{\text{Nominal exchange rate} \times \text{Inflation rate of the own country}}{\text{Inflation rate of the foreign country}}$$
- (ii) The following will cause a change in the real exchange rate, which will lead to an increase in a country's net exports.
- A fall in nominal exchange rate while price level remains unchanged.
  - An increase in foreign inflation rate relative to the domestic inflation rate while nominal exchange rate remains unchanged.
- (iii) - Adverse effect on trading and investments due to frequent fluctuations and uncertainties in exchange rate.
- Fluctuations of the exchange rate can be widened further due to speculative activities, which are performed using the movements in exchange rates. This will adversely affect exports and import substitute industry. Efficiency of the government monetary policy will fall.
- (iv) Inflation will increase if import prices increases. Cost of industries, which highly rely on imports, increases when import prices increases. Foreign debt service cost will also increase and the budget deficit is likely to increase. Foreign direct investments (FDI) will be discouraged. Net exports can be increased if real exchange rate falls.
- (05.) (i) Social capital includes inter personal relationships, norms and variety of behavioural ethics which emerge through self support teams, networks and organizations set up to fulfil targets aiming at common well being of people. These social bonds result in community development. Social capital is something, which emerges through mutual trust and understanding among a group of people who work together with the aim of achieving some common welfare objectives.  
E.g.: Farmers associations, women's societies, credit granting societies etc.
- (ii) High level of savings is necessary for economic growth. This is because savings provides necessary source of funds for capital formation. But rise in capital formation alone is not sufficient for an economic growth. There are many other factors, which affect economic growth. Effectiveness of investments (Whether the area in which investment is made is effective or not.)  
Technology, Monies saved should be mixed up with technology, education and training, entrepreneurship (Ability and willingness to bear risk), research and development, better coordination among investment projects, macroeconomic stability, institutional structure which is favourable to economic growth.
- (iii) Ensuring macroeconomic stability.
- Ensuring a conductive environment to promote local and foreign investments.
  - Developing infrastructure facilities.
  - Promoting domestic savings to uplift capital formation.
  - Investing more money in research and development.
  - Correcting market failures.
  - Deregulation and restructuring.
  - Investing more in education to improve labour productivity. (Human capital)

- (iv) Economic growth is a persistent increase in real national product of a country over a long period of time such as 10-15 years. This shows the percentage increase in real national product. Economic development is different to economic growth. Economic development refers to the improvement in qualitative aspects of lives of people. In other words it underlines the process of human development.
- Economic growth is necessary to alleviate poverty and unemployment problem and thereby to obtain a higher level of living standard. It is necessary to have a favourable economic, social, political and institutional set up to achieve economic development. A country should strive for a sustainable environmental friendly development.
- (06) (i) Labour force participation rate (activity rate) is the labour force as a percentage of population of working age. In Sri Lanka the labour force is defined as persons aged 10 years and above who are able and willing to work in a given reference period.
- Hence labour force participation rate can be calculated by taking people aged 10 years and above who are employed and unemployed as a percentage of total population aged
- $$\frac{\text{Employed aged 10 years and above} + \text{Unemployed aged 10 years and above}}{\text{Population aged 10 years and above}} \times 100$$
- (ii) There is a mismatch between skills given by education system and skills expected by employers. State sector jobs are preferred by people than private sector jobs. Therefore people wait till they get jobs in the public sector though there are enough job vacancies in the private sector. Due to some rigid labour legislation there is no long term growth in the economy which can generate jobs suitable for educated youth. (Slow economic growth)
- (iii) - Investments in new technology.  
- Increasing the capital intensity in production.  
- Training  
- Management policies.  
- Better employer – employee relationship  
- Macroeconomic stability.  
- Deregulate the labour market.  
- Privatisation.  
- Vocational training.
- (iv) There are about 50 labour ordinances in Sri Lanka. These legislations are a great hindrance for the development of a more flexible and efficient labour market. Hence, the government had taken necessary steps to abolish some of these legislations in the recent past.
- 1942 Factory ordinance was amended. Accordingly some of the restrictions on employment of women overtime were removed.
  - 1950 Labour Dispute Act was amended. Accordingly the time taken by labour tribunals to resolve labour disputes was reduced.
  - 1971 No. 45 Termination of Services Act was amended. The right to terminate services of employees by paying compensation is given to employers.
- (07). (i) Absolute poverty means the inability to attain the minimum nutrition level needed by an individual to survive or inability to satisfy the basic needs. Absolute poverty can be measured using poverty line. Relative poverty shows the disparity in income distribution of a country. Here income of a certain section of the population is being compared with another section. Here we measure the poverty of a person relative to another. Most of the time we calculate percentage of total income earned by the lowest 40% income group. Relative poverty can be seen even in rich countries.
- (ii) An economic growth is necessary to alleviate poverty. But it should be noted that economic growth alone cannot alleviate poverty. This is because poverty is caused by both economic and non-economic factors (social factors). Benefit of the economic growth may have not been distributed equally among everyone. That is, there may be a disparity in income distribution. And also poor may have got marginalized. That is, education, technology, market may have been kept away from poor.
- Poor tend to be voiceless because of lack of organizing power.
  - Therefore, they cannot influence socially one politically.
- (iii) It is inefficient in directing benefits to poor. 40% of Samurdhi benefits are enjoyed by 60% of high income earners in the population.
- Political influence in selecting beneficiaries.

- Minorities are at a disadvantage in selecting beneficiaries.
- (selection criteria have been unfavourable for minorities)
- The programme is completely backed by the government.

(08). (i) Promoting economic growth by strengthening market mechanism is referred to as structural adjustment policies.

This policy includes structural reforms, which are necessary to strengthen the market forces and ensure macroeconomic stability.

They are,

- a. Public finance discipline (Reducing budget deficit)
- b. Deregulating international trade.
- c. Adopting competitive exchange rate policies
- d. Privatisation
- e. Tax reforms
- f. Liberalization of interest rate
- g. Deregulation

(ii) Cutting down expenditure on welfare and subsidies in order to reduce the budget deficit. It will affect poor and low-income earners adversely.

- Economic growth rate tends to fluctuate rather than staying at a steady level
- Although trade is a growth engine, liberalization of trade unilaterally might restrict the growth of export trade
- Government expenditure on education and health sectors may be cut down
- Bringing exchange rate in to a competitive position can lead a depreciation of currency and subsequently domestic inflation
- Liberalization of imports will pose a threat to domestic industries
- It may increase poverty and disparity in income distribution.

(iii) Making the reform process of labour market more flexible.

- Increasing the competitiveness of reforms in the financial sector
- Reforming the public enterprises
- Relaxing in the field of power and energy (privatisation)
- Reforms in land laws. Land market is not flexible. Competitive pattern should be created. Private ownership should be created.