Economics

Teachers' Guide

Grade 13

(Implemented from 2018)

Department of Commerce
Faculty of Science and Technology
National Institute of Education
Maharagama

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Message from the Director General …

With the primary objective of realizing the National Educational Goals recommended by the National Education Commission, the then prevalent content based curriculum was modernized, and the first phase of the new competency based curriculum was introduced to the eight year curriculum cycle of the primary and secondary education in Sri Lanka in the year 2007

The second phase of the curriculum cycle thus initiated was introduced to the education system in the year 2015 as a result of a curriculum rationalization process based on research findings and various proposals made by stake holders.

Within this rationalization process the concepts of vertical and horizontal integration have been employed in order to build up competencies of students, from foundation level to higher levels, and to avoid repetition of subject content in various subjects respectively and furthermore, to develop a curriculum that is implementable and student friendly.

The new Teachers' Guides have been introduced with the aim of providing the teachers with necessary guidance for planning lessons, engaging students effectively in the learning teaching process, and to make Teachers' Guides will help teachers to be more effective within the classroom. Further, the present Teachers' Guides have given the necessary freedom for the teachers to select quality inputs and activities in order to improve student competencies. Since the Teachers' Guides do not place greater emphasis on the subject content prescribed for the relevant grades, it is very much necessary to use these guides along with the text books compiled by the Educational Publications Department if, Guides are to be made more effective.

The primary objective of this rationalized new curriculum, the new Teachers' Guides, and the new prescribed texts is to transform the student population into a human resource replete with the skills and competencies required for the world of work, through embarking upon a pattern of education which is more student centered and activity based.

I wish to make use of this opportunity to thank and express my appreciation to the members of the Council and the Academic Affairs Board of the NIE the resource persons who contributed to the compiling of these Teachers' Guides and other parties for their dedication in this matter.

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Instructions of Referring to the Teachers Instructional Manual (Teachers Guide)

The Economics syllabus for General Certificate of Education (Advanced Level) is implemented from 2017 onwards after being revised under the national curriculum revising policy which is implemented once in every eight years. The Economics which was introduced as an Advanced Level subject in 1997 was undergone to the first revision on competency based in 2009 has been orderly listed out under 12 competencies for both grade 12 and grade 13 in this manual. A practical teaching-leaning process that can be implemented in the classroom for 42 competency levels from the first competency in grade 13 syllabus has been proposed in this manual.

This teacher instruction manual has been complied all the competency levels prescribed for grade 13 in Economics syllabus of General Certificate of Education (Advanced Level).

The relevant competency, competency levels, the number of periods allocated for the competency level, the learning outcomes expected to have been achieved at the end of learning the subject matters under the competency level, are contained first and then proposed instructions for lesson planning, followed by a guideline to explain the subject matters are also contained in this manual in great details. Proposed activities for assessment and evaluation are also associated with many competency levels at the end.

The classroom teacher-learning process is expected to be planned in a manner of Economics will be developed parallel to the growth of attitudes, skills and practices of the students. An adequate guidance is expected to be gained for that purpose through this Teacher Instruction Manual.

Every teacher should lead the students for practical learning through planning the lessons for classroom teacher – learning process with reference to the proposed benchmarks under instructions for lesson planning and the detailed facts contained in the guidelines to explain the subject matters.

Since Economics is a practically important subject, the lesson plans are expected to be prepared by the teachers expanding the boundaries of the scope of their comprehension, reviewing the updated subject matters simultaneous to the prospective changes that may possibly take place in the business field.

Learning Outcomes and Model Activities

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency Level 7.1 : Inquires money, types of money and functions of money.

Expected Learning outcomes :

- Defines money.
- Explains the characteristics of money.
- Explains functions of money with examples.
- Presents special characteristics of various types of money and provides examples.

Instructions for Lesson Planning:

- Present to students which used as money in the past such as sea shells, metal pieces, old coins and current money such as coins notes, cheques, treasury bills and debit cards?
- Inquires students ideas relating to that, conduct a discussion by highlighting the following facts.
  - Sea shells and metal pieces were used as money in the past.
  - Various things such as coins, notes, treasury bills, credit cards and debt cards are used as money in the present.
  - Some weakness existed in the process of money excahnge during past were eliminated with the use of present money.

Purpose instructions for Learning :

- Out of the followings the monetary instruments pay attention to the monetary instrument given to your group.
  - A Rs. 100 note
  - A Rs 10 000 cheque
  - A Rs. 10 000 worth of treasury bill
  - A Rs. 10 000 worth of credit card

- Write down the answers to below questions by the students.
  1. What type of money that your group has ?
  2. What are characteristics of that money
  3. What are the main functions of that money?
  - Be prpared to present your findings to the entire class.

Guidelines to explain subject matters :

- Money is anything that is generally accepted as a means of payment in the exchange of goods and services.
- Following characteristics can be seen with related to good money.
  - General acceptnce
  - Durability
  - Uniformity
  - Divisibility
  - Portability
  - Stability of value
  - Legal validity
  - Difficulty to counterfeit
  - Easy identification

- Four main functions of money can be presented as follows.
  - Act as a medium of exchange
  - Act as a store of wealth
  - Act as a unit of account
  - Act as a standard of deferred payment

- Act as a medium of exchange means that act as an intermediary when exchange the good and services and production factors.
- Because of this function of money it can be clearly identified from other assets.
- The main difficulties of barter system: absence of double coincidence, transport, storage, divisibility were solved with the use of money.
- In barter system it was very difficult to exchange goods at a situation of the obsence of double coincidence of wants.
- Mutual adjustment of the wants of both parties engaged in transaction is known as double coincidence.
- In barter sustem was very difficult to exchange goods at a situation of the absece of double coincidence of wats.
- Money as a medium of because of the common acceptability.
- However as money act as an intermediary, when making transactions double coincidence was not needed.

- Due to the use of money as a medium of exchange division of labour and specialization expanded and it paved the way for large scale production.
- Use of money to store value for future needs without risk and difficulty is known as a store of value. Although storage problems and the problem of perishing arrive in storing the value through goods it does not arises when storing value with the use of money.
- Most persons store value with money because of its perfect liquidity. Maintainance of purchasing power of a money at a constant level make this function of money more efficient.
- Identify the changes of the value of all goods, services and assets is known as unit of accounts and it make exchange process more efficient.
- It has been easier to make financial reports such nas business accounts, national accounts, government budget and balance of payments as money act as a unit of account.
- Ability to settle the past debts at a future date more efficiently is called as a medium of deferred payment. When business firms sell goods at a debt and when financial institutions provide loans. It will take atime to resettle these payments. Use of money provided the ability to resettle these payments without any uncertainty or risk.
- Constant value of money would make efficient the function of money as a medium of deferred payment.
- The money use in present has been given below.
  - Currency
  - Bank money
  - Near money
  - Money substitutes
  - Electronic money / Digital money
- The coins and notes issued by the financial authority which represent a certain value without internal value is known as currency. Currency is leagally valid for any transaction within a country and it consists of perfect liquidity.
- The money balance of demand deposits which can be used to write cheques is known as bank money. Bank money has perfect liquidity.
- The highly liquid assets which act as a store of value but which does not act as a medium of exchange are known as near money. Near money can be easily converted to medium of exchange (money).

Examples : Fixed deposits, savings deposits, treasury bills, exchange bills, promissory notes.

- An instrument which act as a temporary emedium of exchange and which does not act as a store of value is known as money substitutes.

  Examples : credit cards and debit cards

  Money substitutes can be used for short term transactions instead of money and cheques.
- An electronic card issued by a particular financial institution to buy goods and services at an approved limit of money and which issued granting permission to obtain money when itis needed is known as a credit card.
- Due to following reasons. Credit cards are not considered as money.
  1. The all activities complying by the money does not complying by credit cards.
  2. To use the credit card further after exceeding the maximum limit of it, the loan must be settled to the financial institute.
- An instrument which used to withdraw money from ATM or which transfer money to another account when customers deposit their money at a financial institution is known as a debit card.
- Debit cards are not considered as money as it does not perform all the activities of money.
- Money stored with the use of an electronic system and make transactions with the use of a software is known as electronic money. Debit cards, Credit cards, E Banking ,easy cash and bittcoins are examples for electronic money.

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency Level 7.2 : Inquires the reasons for money demand and the factors affecting the money demand.

Expected Learning outcomes :

- Defines money demand
- Presents the reasons for money demand.
- Analyses the reasons for money demand with graphs.
- Analyses the factors that determine money demand.

Instructions for Lesson Planning:

- Inquire from the students whether they need money or no.
- Lists the reasons for the need of money after inquiring from the students.
- Conduct a discussion highlighting the factors mentioned below.
  - All people keep the money for various activities
  - The preference of the people to keep money in their hands is defined as money demand.
- So many reasons affect for money demand.

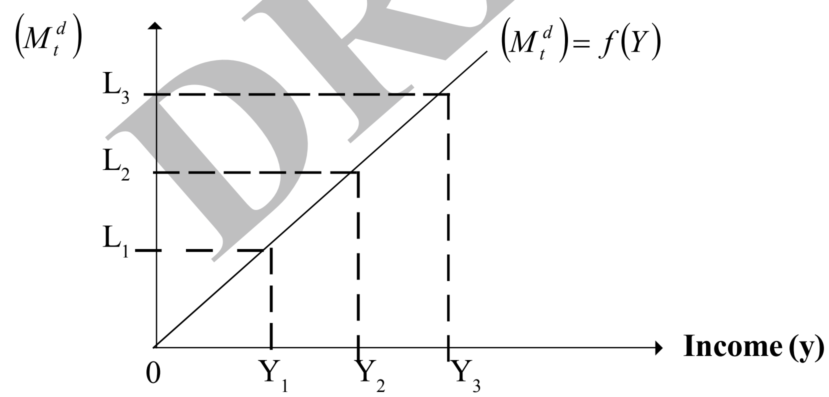
Purposed Instructions for Learning :

- Divide the students in to several groups
- Give instructions to make a schedule which shows the opportunities that want money.
- Give instructions to classify those opportunities as transactionary motive, precautionary motive and as speculative motive.
- Inform the students to determine the expenditure that may needed for above functions by assuming household income received per month.
- Tell the students to determine the amount spent for above functions, if it doubles the monthly income.
- Ask them to construct a graph showing to the relationship between increase in income and allocated amount for above functions.
- Ask them to explain the relationship between income and allocated amount for above functions using the graph.

Guidelines to Explain Subject Matters :

- The preference of the people to keep money in the form of money it self at a given period is known as demand for money or as liquidity prference.Three main factors affect demand for money.
    - Transaction motive
    - Preactionary motive
    - Speculative motive
- Since there is a gap between a person's income received and expenditure made holding of a money balance for day to day transactions is called demand for money on transactionary motive.
- As there is a time gap between earning of income and spending money balances should hold to carry out transactions.
- Demand for money on transaction any motive mainly depend upon a person's income level.
- There is a positive relationship exists between income and demand for money on transactionary motive. It can be presented by a graph as below.

Demand for money on transactionary motive

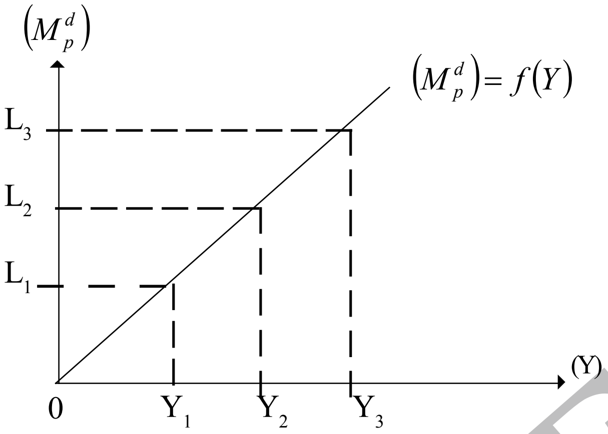


- According to the above graph, the people intended to increase the demand for money when their income increased and intended to decrease the demand for money when their income decreased
- Except the income, interest rate, general price level, innovations of monetary market, and institutional factors also affect the demand for money on transactionary motive.

- Holding money balances to fulfill unexpected situations which cannot be planned is known as demand for money on precautionary motive.

  Examples : Holding of money to use at the situations , accidents and diseases.

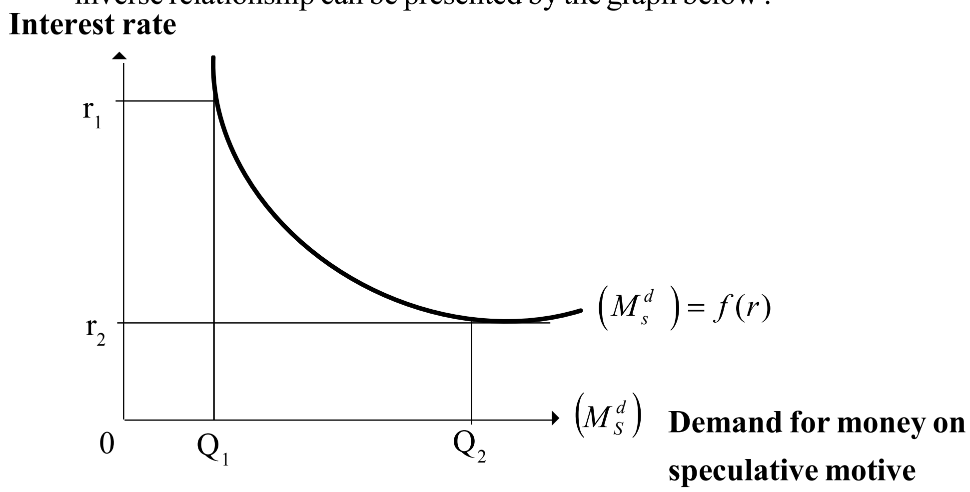
- There is a positive relationship exists between income and precautionary motive for money demand. It can be shown by the graph below.



M_p^d = Demand for money on precautionary motive

Y = Income

- According to the above graph, people are intended to increase the demand for money on precautionary motive when income increases and intended to keep less amount of money when income decreases.
- Demand for money to gain fututure benefits by investing on bonds is called as demand for money on speculative motive. Inother words keeping of the money as an asset is known as demand for money on speculative motive.
- The people intended to keep various assets with them and the selection between bonds and money is depend on the interest rate. Accordingly, there is a negative (inverse) relationship exists between iterest rate and demand for money on assets and bonds. That inverse relationship can be presented by the graph below .



- According to the above graph, demand on speculative motive decreases when the interest rate increases and demand for money increases when the interest rate decreases.
- There is an inverse relationship exits between interest rate and prices of bonds. Accordingly when interest rate increases the price of bonds decreases and when interest rate decreases the price of bonds increases.
- If presents interest rates are low bond prices will remain at a high level. However, people expect that the interest rate will increase and prices of bonds will decrease in future apparent to that. Because of this, people intended to purchase bonds and as a result interest rate incrases and speculative motive for money demand decreases.
- If people expect that the interest rate will go down in future and bond pricesincrease apparently, people tend to sell bonds. Therefore when interest rate decrease speculative motive for money demand incrases.
- Following factors affect demand for money.
  - Real income
  - Interest rate
  - Price level
  - Future for money
  - Institutional factors
  - Financial market innovations
- There is a direct relationship exits between real income and demand for money. which means when real income increases demand for money also incrases.
- There is a negative relationship exists between interest rate and demand for money, which means when interest rate increases demand for money decreases.
- Demand for money also incrases with incrase in price level.
- When it expects inflation rate will incrases at future consumers tend tobuy more goods and services today as a result the amount of money hold will incrases.
- When it expects the prices of securities incrase at future as it tend to buy more securities today the amount of money hold in hand decreases.
- The time gap between two terms of income received is called institutional factors. When income is received during short time gap demand for money decreases and when the period of time in which receiveing of money is longer the amount of money held increases.
- When financial market innovations improve the amount of money held decreases.

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency Level 7.3 : Presents money supply analytically.

Expected Learning outcomes :

- Defines money supply.
- Describes the definitions of money supply in an order.
- Analyses the definitions of money supply.
- Presents the factors that determine money supply.
- Analyses the factors that determine the base money.
- Analyses the relationship between money multiplier and base money with an equation.

Guidelines to explain subject matters :

- The total stock of money circulates among the general public at a given period is called money supply. Money supply is also defined as monetory aggregate.
- The definitions of money supply change with time. There are two mainfactors which affect that,
  1. The changes in the financial structure of an economy
  2. The changes in the financial assets with perfect liquidity which should consider as money.
- The various definitions presented relating to Sri Lanka's money supply are given below.
  - Narrow money supply (M_2)
  - Broad money supply (M_1)
  - Consolidated broad money supply (M_{2b})
  - Very broad money supply (M_4)
- The public currency (notes and coins) and total demand deposits of public with commercial banks are known as narrow money supply.

  M_1 = Cp + DDP

  Cp = currency held by the public

  DDP = demand deposits held by the public at comercial banks.
- Broad money supply is the sum of savings and time deposits of public with commercial banks and narrow money supply.
  - $M_2 = M_1 + TSD_P$

- M_1 = Narrow money supply
- TsDp = savings and time deposits of public with commercial bank

- Consolidated broad money supply is the sum of 50% of time and saving deposits of non residence foreign currency accounts and savings deposits of resident at foreign currency banking units.

$$M_2 b = M_2 + T_s D_{NRFC} + RD_{FCBU}$$

M_1 = Narrow money supply

$T_s D_{NRFC}$ = 50% of time and saving deposits of non residence foreign currency

RD_{FCBU} = Time and saving deposits of rsident at foreign currency banking units.

- Very board money supply consist of the sum of time and savings deposits of the public with licensed specialized banks and time and savings deposits of public with registered financial companies.

$$M_4 = M_2 b + LSB + RFC$$

LSB = time and savings deposits of the public with licensed specialized banks

RFC = deposits of public with registered financial comapnies

- Determinants of money supply are given below.

1. Net domestic borrowings of the banking system.
    - Loans provided to government corporations
    - Net foreign assets of central bank
    - Net foreign assets of commercial bank
2. Net domestic assets of banking system consist of
    - Net lendings to the government by the banking system.
    - Net lending of private sector
3. Net foreign assets of banking system
4. Other Net Assets

- Government borrow money frrom the central bank and commercial banks through securitiesnto fulfill the budgut deficit. Money supply increases with that after it received by the public as currency.

- When commercial banks lend money to the private sector demand deposits are created. As demand deposits are a part of money supply , money supply incrases.
- The difference between foreign assets and liabilities of central bank are as follows.
- Net foreign assets of the central bank are as follows.
  - Foreign currency of central bank.
  - Investment of central bank made at securities of other countries
  - Special Drawing Rights maintained by the name of central bank.
  - Central bank borrowings from other countries
  - Deposits of international institutions and foreign bank with the centra bank.
  - Foreign assets of commercial bank are aaaaaaas follows.
    - Loans and aids provided to foreign banks
    - Discounted bills
    - Foreign currency with commercial banks
    - Commercial banks' money held at foreign branches of the bank.
    - Deposits of foreign banks maintained at domestic banks.
- When foreignn assets of the banking system incrase lendings increases with incrases of the recerves of banks. As a result money supply incrases with the expansion of demand deposits.
- The diffrence between assets and liabilities which did not capture to the foreign and domestic net foreign assets is called net other assets of the banking system.
- When net other assets of the banking system increase money supply also incrases.
- The direct financial liabilities which supply the basis for the aggregate money supply of a particular country is known as base money. Base money also named as high powered money., and as reserve money.
  - Component of high powered money are as follows.
    - Note and coins of public(Cp)
    - Currency of public with commercial banks(Ckb)
    - Deposits of commercial; bank with the central bank(RR)
    - Deposits of other government institutions maintained at central bank(DOI).

Liabilities	Assests
• Public currency (CP) • Currency with commercial bank (CKB) • Depoeits of commercial bank with central bank (RR) • Deposits of other institutions (D_{OI}) • Deposits of Government (DG_{CB}) • Foreign loans (FB_{CB}) • Oher liabiliteis (OL_{CB})	• Loans of commercial bank (A_{KB}) • Loans of government (CG_{CB}) • International resurves (FA_{CB}) • Other assets (OA_{CB})

- According to the above balance sheet, main liabilities of central bank which belongs to base money supply has been given below.
  1. Public currency (C_P)
  2. Currency of commercial bank (C_{KB})
  3. Deposits of commercial bank with central bank (RR)
  4. Deposits of other institutional with central bank (D_{OI})
- According to the balanced sheet of central bank, determinants of base money can be shown as below.
  1. Net domestic assets with central bank
     - Advances to commercial bank by the central bank (AKB)
     - Net landings to government by by the central bank (NCG_{CB})
  2. Net foreign assets of central bank (NFA_{CB})
  3. Other assets of central bank (NOA_{CB})
- When the increase the net assets above components, increase the base money supply and when decrease the assets it decrease the base money supply. (Study with the students that it can be identified the determinants of base money. with the use of the componenets of assets the central bank).
- The relationship between total money supply and base money is shown by the money multiplier. It can be shown by a equation as follows.

$$M = KH$$

M = Money supply

K = Money multiplier

H = Base Money

- According to the relationship between money multiplier and base money, money multiplier can be shown as below.

  $$K = \frac{M}{H}$$

- In Sri Lanka as money supply is calculated in various ways, money multiplier can also be calculated in as different ways M_1, M_2, M_{2b}, M_4, and M_5 is several method.

Example :

$$\text{Narrow money multiplier} = \frac{\text{Narrow money supply } (M_1)}{\text{Base money}}$$

$$= \frac{\text{Broad money supply } (M_2)}{\text{Base money}}$$

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency level 7.4 : Analyses concepts theory and measures related to price level.

Expected Learning outcomes :

- Defines the general price level
- Explains the concepts related to general price level
- Analyses reasons for inflation with various approaches.
- Examines economic consequences of inflation.
- Explains steps to control inflation.
- Introduces the various price indices currently used to measure change of general price level in Sri Lanka.
- Examines recent trends in general price level of Sri Lanka using the above indices.

Guidelines for explain subject matters :

- The value of goods and services consider as the price.
- The amount of goods and services that can be bought using given amount of money changes with change in price.
- There are three important forms relatively to the price of goods and services as absolute price, relative price and as general price level.
- The market price of a particular good and service is the absolute price.

  Example : The price is Rs. 25 of a pen

  The price is Rs. 100 one kilo of rice
- The ratio between prices is known as relative price.

  Example : The price of one kilo grams of rice is four times than a pen(1 : 4)
- The average value of absolute price of all goods and services is known as general price level.
- There are several concepts relatively to the general price level.
  - Inflation
  - Deflation
  - Dis-inflation
- Continuous increase in General Price level of an economy is known as inflation.
- Continuous decrease in General Price level of an economy is known as deflation.

- Gradual decrees the inflation rate value is known as disinflation.
- Reasons for inflation is explained in a theoretical approaches.
- Accordingly, there are two main approaches which explain reason for inflation.
  1. Demand pull inflation
  2. Costs push inflation
- Increase in general price level of goods and services due to an increase in demand relative to supply is meant by demand pull inflation.
- Which means increase the general price level due to the excess aggregate demand.
- Demand pull inflation is also known as too much chasing too few goods.
- There are alternative two approaches of demand pull inflation
  1. Quantity theory of money
  2. Keynesian theory
- Quantity theory of money is a theory that presents the behavior of price level based on equation of exchange.
- Quantity theory of money states that there is a direct relationship exists between change in price level and change in stock of money.

  Example : If the money supply increase in tenfold the price level will also increase in tenfold.
- To explain this relationship between money supply and price level. Quantity theory of money used the following equation v.

  MV = PT
- Equation of exchange truism is a truism of the way of it defining.
- Although it has been presented by an equation, actually it is a truism. Therefore it can write as $MV \equiv PT$

  MV = value of transactions made with money

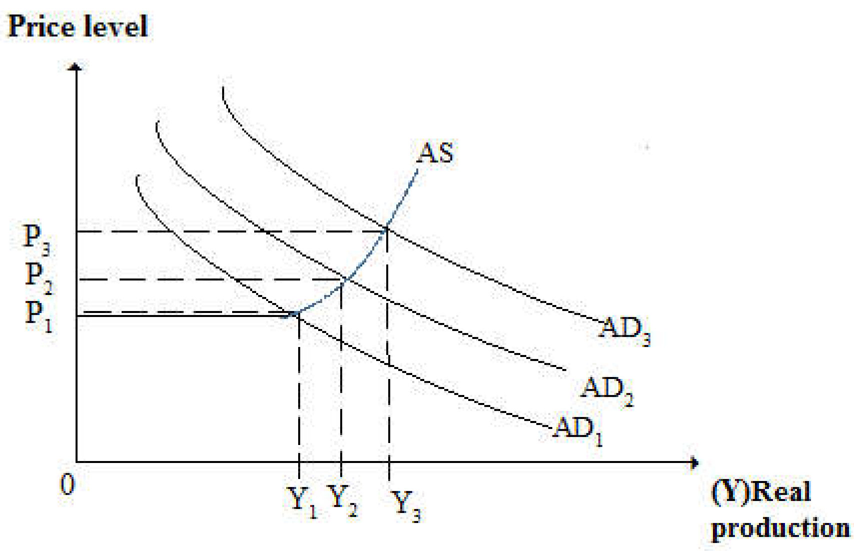
  (M = money supply, V = Velocity of circulation.)

  PT = The total value of transactions of the economy

  (P – Price level, T. amount of transactions)
- Accordingly equation of exchange can be converted to a theory based on the assumptions related to the behavour of variable in the exchange equation.

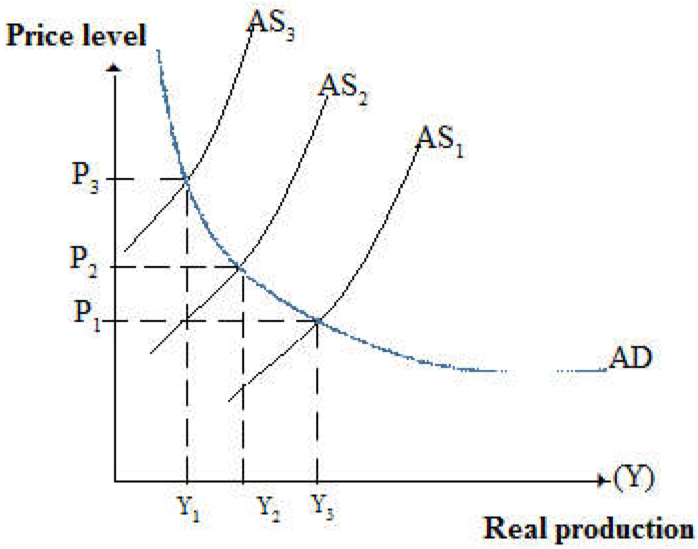
- There are two assumptions which use for that,
  1. Velocity of circulation of money being constant.

     Velocity is constant because it is a factor that determine by the constant behavior of people.
  2. Volume of transactions being constant. Volume of transactions is constant because, the economy is in its full employment. (Y also used instead of T)
- Assuming V and T remain constant quantity theory of money shows the increase in price level as proportionate to the stock.
- Keynesian theory use aggregate income and expenditure analysis to explain.
- After the economy reach to a macro economic equilibrium, if the aggregate demand increase the price level will beginning to increase because the supply can't be increased.
- The Keynesian approach of the inflation i. shown by the graph below.



- According to the above graph Y_1 shows the full employment level of output.
- The relevant aggregate demand is shown by AD1 curve.
- If the aggregate demand increase more than the full employment level of output of an economy the general price level increase as p_1, p_2 and p_3 and generates demand pull inflation.
- Cost push inflation theory states that increase in the general price level would be occurred due to the decrease in the aggregate supply due to an increase in input prices.
- These theorists indicate that the general price level increase as a result of the struggles of pressure groups.

- Those pressure groups are,
    - Organized labour
    - Activities of oligopoly firms
- As a result of the demanding high wages by the organized labour wages have to be increased and the cost of production increases as result with that the supply decrease and the general price level increases. This type of situations is consider as a wages push inflation.
- On the other hand, the general price level increase due to the decrease in the supply as a result of the activities of oligopoly firms due to increase in the cost of production when they maximize profits. This can be named as profit push inflation.
- Cost push inflation occur with increase in cost of production with an increase in price of inputs and decrease in supply is shown by the diagram below.



- According to the above graph at Y_3 level of output price level will be P1. The aggregate supply curve shifts to the left from AS_1 to AS_2 due to increase in the cost of production.
- However as the aggregate demand does not change as a result of the decrease in the aggregate supply general price level increased from P_1 to P_2 .That is an inflationary situation.
- There are favourable and unfavourable effects of inflation. some of them are given below.
    - Unfavorable for income and wealth distribution.
    - Distort the economic decision making process.
    - Unfavourable for lenders and beneficial for borrowers.
    - Unfavorable for savers.
    - It can be explain as follows

- Savings are decreased due to the decrease in of possibility of savings due to inflation.
- On the other hand, savings can be decreased due to decrease of the real interest rate.

Real interest rate = Nominal interest rate – Inflation rate

Example : Nominal Interest rate = 16

Inflation rate = 20

Real interest rate = 16- 20

= -4%

- If the real interest rate would be negative it is unfavourable for savers.
- It is unfavorable for fixed income earners and favourable for variable income earners.
- Examples for fixed income earners are, office workers, government employees, pensioners, dependents on the grants of government welfare.
- Inflation is unfavorable for the fixed income earners as it decrease the purchasing power or real income.

$$\boxed{\text{Real Income} = \frac{\text{Nominal income}}{\text{Price index}}}$$

- Because of the uncertainty of the future prices long term investments are discouraged and tend towards only short term investments.
- Occur the shoe leather cost and menu cost.
- Increase the cost of living and decrease the standard of living.
- Harmful for competiveness of export.
- Depreciation of exchange rate
- Increase in absolute poverty.

  Some of policy approaches that can be used to are given below.
  - Limitation of aggregate demand
  - Fast growth of aggregate supply
  - direct government intervention
  - Remove the barriers of efficiency allocation of resources
- Limitation of aggregate demand means that, to control the inflation growth of aggregate demand should be kept at lower level.

- According to the demand pull inflation, if inflation occur due to increase in aggregate demand along with a monetary expansion to control inflation the growth of aggregate demand should be minimized.
- The growth of aggregate demand can be controlled by monetary policy and fiscal policy.
- The supply side economists believe that, if there is any possibility to fast the growth of aggregate supply then the rate of inflation can be kept at a lower level.
- The supply side economists show that the inflation occurred due to decrease in supply.
- Therefore, they do not interest more on demand management policies but pay more attention to increase the aggregate supply.
- To do this they emphasize more on removal of taxes.
- Because of the removal of taxes being huge incentive for produces and investors, it would be a reason to increase the production.
- Hence, they believe encouraging of the private investors to fast the growth of production.
- Directly involvement of government to control the inflation consider as a simple policy performance.
- Price control policies and income control policies are example for direct control policy.
- Imposing of limitations over wage rates and amount of increase in prices are done for this.
- It is not easy to implement these direct control policies practically.
- Although, wages and price control policies are common in a planned s economy, in a market economy direct involvements related to wages rates and prices on the situations of war and crisis.
- Barriers related to efficient allocation of resources is a characteristic that can be seen in both developed and under developing countries.
- Imposing taxes, elimination of subsidies, imposing prices by regulatory bodies and rationing of imports are examples for such barriers.
- Inflation can be controlled by increasing production with an elimination of such barriers.
- The numerical measure of which measure the changes of general price level in a certain period of time is known as a price index.
- When constructing a price index the year which use for comparison is known as base year.
- Considering the, base year's as 100 it measures how the price index has changed in the other years.

- The price indices are formulated using various methods and when constructing a price index, factors such as selection of the basket of goods, weighting, determination of the sample and selection of the are concerned.
- There are several price indices which use to measure the changes of general price level in Sri Lanka they are given below.
    - New Colombo Consumer Price Index
    - National Consumer Price Index
    - Producer's Price Index
    - Implicit Price Index/ GDP deflator

- Main features of New Colombo Consumer Price Index are as follows.
    - Consumer's price index is used to measure the changes in the general price level of Sri Lanka from 2008 May.
    - Published by the department of census and statistics.
    - Arrange according to the income and expenditure survey of department of census and statistic in 2002.
    - Base period is 2013
    - The geographical coverage limited to the Colombo district.
    - The geographical coverage of the new Index has been widened to all the urban areas of the Colombo district.
    - Weights were given to total expenditure of household of urban of colombo district.
    - Major groups are 12 and sub groups are 105.
    - Including the alcoholic, tobacco and narcotics to the consumption basket.
    - The price collection of the new index has been widened to cover 14 price collection centers.
    - The latest consumer price index constructed to measure the changes of general price level in Sri Lanka covering the entire country which consider 2013 as the base year is the national consumer price index.
    - The main features of NCPI are as follows.
        - The national consumer price index covers a wider geographical area(Cover all nine provincesin Sri Lanka)
        - Formulated by census statistics department of Sri Lanka

- For the NCPI the prices are collected for each item in the market basket from 3 price collecting centers in each district.
- National consumer price index is constructed based on a sample selected representing the whole country 2012$13 and it represents wider consumer behaviour.

- The base year is (2013 = 100)
  - Major groups are 12 and sub groups are 105.
  - The expenditure of alcohol and narcotics are considered in consumption expenditure.
  - Maintenance of price collected centers in each district.
  - Producer's price index is a new index introduced by the department of census and statistics in Sri Lanka from second quarter in 2015.
  - This index measures the changes if average price level received by domestic producers for their goods and services produced along with time.
  - Introduction of this index helped to show fluctuations of market prices. Precisely and also helped to make more correct decisions.
  - Producer's price index is also considered as an important macroeconomic index.
  - It is also considered as a signal which can forecast short term inflationary situations.
  - The duty of producer's price index replaced the work done by whole sale price index which was constructed by the Central Bank of Sri Lanka.
  - GDP deflator is an index revealed by the information of gross domestic product.
  - It is also called as implicit price index.
- When estimating domestic product at a particular yea using current price and constant price, increase in the value received at current price depicts an increase in the price level of an economy.
- When estimating using current price and constant price, the index which shows increase in current price level is called GDP deflator.
- GDP deflator is estimated as follows.

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency level 7.5 : Inquires the functions of financial system in Sri Lanka.

Expected Learning outcomes :

- Defines the financial system.
- Analyses the components of financial system of Sri Lanka.

Guidelines to explain subject matters :

- A financial system is the sum of markets, financial institutions, financial instruments and financial infrastructure decisions of the main agents of domestic and foreign households, business firms and the government.
- Financial system consists of following components.
  - Financial institutions
  - Financial market
  - Financial instruments
  - Financial infrastructures
  - Regulatory bodies which supervise the financial institutions.
- Financial; institutions are the institutions which supply various financial services and which involve in transactions with various financial instruments.
- The structure of financial system in Sri Lanka mainly consists with four types.
  1. Central Bank of Sri Lanka
  2. Intermediate financial institutions
  3. The firms which supply financial services
  4. Institutions of monetary supervision and regulation.
- The firms which collecting savings from excess find units and supply them to deficit units and earn profits are known as intermediate financial institutions.
- The intermediate financial institutions in Sri Lanka are given below.
  1. Institutions which accept deposits and granted permission to involve in banking activities
  2. Employee Provident Funds / Pension fund
  3. Insurance companies

4. Investment companies
5. Unit trust
6. Leasing companies

The functions of the firms which accept deposits and which granted permition to in involve banking activities are given below.

- Collection of excess money by introducing various types of deposits for the public sector.
- Providing those money as loans and investments for public.

- Examples for the financial institutions which accept deposits and which granted permission to involve in banking activities are given below.
  - Licensed Commercial Banks
  - Licensed Specialized Banks
  - Registered financial companies
  - Co-operative r Rural Banks
  - Thrift and credit co-operative societies
  - Other credit co-operative societies
- Specially organizing financial institutions which help general public and business firms to conduct the financial transactions efficiently at the financial market are called financial service institutions.
  - Examples for financial firms which provide financial services are given below.
    - Vanik banks
    - Fund management institutions
    - Financial Brokers
    - Primary dealers of government securities
  - The institutions established by the government to protect monetary system stability through the operation of rules and regulations are known as institutions of financial supervision and regulations.
  - Examples for such institutions are, central Bank of Sri Lanka, securities and exchange commission and Sri Lanka Insurance Board.
  - Central Bank Report of Sri Lanka has been classified the financial institutions as follows.
    - Central bank
    - Licensed commercial banks
    - Licensed specialized banks

- Other depository financial institutions
  - Registered financial companies
  - Co-operative banks
  - Thrift and credit co-operative society
  - Special financial institutions
  - Special leasing companies
  - Primary dealers
  - Share brokers
  - Unit trusts
  - Intermediaries of market
  - Venture capital investment companies
- Accorded Savings Institutions
  - Insurance companies
  - Employee provident funds
  - Employee trust funds
  - Government services provident funds
- The aggregate market where financial instruments are purchased and well to fulfill the need of short term and long term funds is known as financial market.
- Financial market consists two types,
  1. Money market
  2. Capital market
- The market which exchange the short term assets with a maturity of less than one year which earns an interest such as treasury bills, Commercial papers, and certificate of deposits is known as money market. It consists of following sub markets.
  - Inter bank call credit money market
  - Treasury bills market
  - Commercial paper's market
  - Inter bank foreign exchange market
- The market where commercial banks overcome the disequilibrium situation of its daily liquidity is known as inter bank call money market. In this commercial banks with shortage of liquidity will be borrowed money from the commercial banks with excess of liquidity for a short period of time.

- A financial instrument used for government loans for short terms is known as treasury bills. There are two markets as primary and secondary in treasury bill market.
- The financial instrument used by the business firms for the formation of short term funds is known as commercial papers. As the use of commercial papers depend upon trust when using securities will not be needed.
  - The market which engage in buying and selling of foreign exchange is known as inter bank foreign exchange market.
  - The market which exchange financial instruments of more than one year maturity and shares of companies is known as capital market.
    - Sub markets of capital market are as follows.
    - Treasury bonds market
    - Corporate bonds market
    - Share market
- The main financial instrument which used by the government to obtain medium term and long term loans is known as treasury bonds. The market which exchange treasury bonds classified as primary and secondary markets.
- The market that exchange corporate bonds to find medium and long term funds is called corporate bonds market.
- The market which formulate capital for their business activities by selling shares for the public is known as share market. These transactions are made by the Colombo Share Exchange (CSE).
- The financial instruments which use for financial transactions in Sri Lanka are given below.
- The credit instruments issued by the government
  - Treasury bills
  - Treasury bonds
  - Government securities
  - The credit instruments issued by the companies
  - Commercial papers
  - Debentures
- The instruments which used by commercial banks
  - Certificates of deposits
  - Securities based on assets
  - Leasing

- Call credit
- Business shares

- As the number of financial instruments increased with the development of the financial market as a correct guidance for investors to choose a investments by identifying the quality of financial instruments credit rating was introduced.
- Education of the financial strength of the issuer of financial instrument or credit is called credit rating. By this it would be searched the ability of the borrower to settle the total payment when it matured.
- Examples for credit rating institutions are as follows.
  - Fitch rating
  - Moody's
  - Standard and poor's

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency Level 7.6 : Inquires the objectives and functions of the Central Bank of Sri Lanka.

Expected Learning outcomes :

- Defines the Central Bank of Sri Lanka.
- Presents the objectives of Central Bank of Sri Lanka.
- Defines the monetary policy.
- Analyses the monetary policy instruments by naming out them.

Guideline to explain for subject matters :

- Central bank of Sri Lanka was established in 28th of August 1950 by the monetary law act No. 58. It was established following the report presented by the baking economist John Exter.
- Central bank was the independent institution established to control Sri Lanka's monetary policy, to provide constantly for monetary activities, and to maintain economic and price stability along with financial stability.
- Following the amendment made to the monetary law act during December, 2002 two objectives of central bank are shown at present.

  1. Maintaining economic and price stability
  2. Maintaining financial system stability

- Economic and price stability means constructing of the monetary policy to reach a lower level of inflation. There are some reasons for the importance of economic and price stability.
  - Promotion of economic growth
  - Efficient distribution of resources
  - Reducing the risk of producers, consumers and investors
  - Constructing of economic plans
- Ability to stay stable over any kind of internal or external shock which occur in economic, financial, political or any other filed is called financial system stability.
- Day to day functioning of central bank is identified as a service provided over government, general public, banks and financial institutions separately or as a service provided to country's economy in as a whole. There are few such functions.

- Controlling of monetary policy
- Controlling of exchange rate policy
- Issuing of currency
- Management of official foreign reserves
- Providing of license to primary dealers who engaged in banking financial cooperation activities and government security activities along with regulation and evaluation.
- Act as a banker and financial agent to the government

- Agency functions
    - Management of public debt
    - Control of foreign exchange
    - Management and administration of employee provident fund
    - Implementing of small scale financial programmes and management of rural debt schemes

- Controlling of financial instruments to affect over money supply and interest rates to reach economic and price stability along with financial system stability is known as monetary policy.
- With an intention of improving monetary policy framework Sri Lanka's central bank act to transfer its monetary policy towards a flexible inflation targeting (FIT) framework.
- Present monetary policy framework has few main objectives.
    - Monetary targeting
    - Flexible inflation targeting
- Central bank implements monetary policy to fulfill above two objectives on an improved monetary policy framework.
- Monetary targeting aims of reaching final target of price stability while controlling intermediary target of broad money supply, (M_2b) which combines with reserve money through money multiplier. Reserve money was act as the operational target of this monetary policy. However, it does not act as the operational target anymore. Broad money continue to serve as the key indicative intermediate variable that direct monetary policy.
- At present although Sri Lanka 's central bank use Average Weighted Call Money Rate (AWCMR) as the operational target of monetary policy instead of reserve money, central bank keeps more faith over instruments such as policy interest rates and open market activities.

- Flexible inflation targeting means stabilizing of real economy while keeping inflation nearly at inflationary targets. However, tight inflationary policy only focuses on stabilizing inflation without concentrating much on real economy.

- Under this improved monetary policy framework, flexible, inflationary targeting while supports flexibility of exchange rate management it also affects to keep mid term inflation at a single digit.

- Instruments used by the central bank to affect over money supply and interest rates to fulfill the objectives of price stability, economic stability and financial stability of the economy are known as monetary policy instruments. There are two types of monetary instruments.

  1. Quantitative monetary policy instruments
  2. Qualitative monetary policy instruments

- Approaches commonly followed to reduce or to control debt are known as quantitative monetary policy instruments.

- Approaches followed by the control bank to central volume or the direction of credit are known as qualitative monetary policy instruments.

- There are three quantitative monetary policy instruments.

  1. Bank interest rate
  2. Statuary reserve ratio
  3. Open market operations

  The interest rate charged by the central bank as lender of the last resort from the commercial banks which face difficulties in liquidity is called bank rate. When bank rate increases money supply decreases due to reduction in bank borrowings along with redacting of reserves. Money supply expands with decrease in bank rate.

- Standing Deposit Facility Rate (SDFR) and Standing Lending Facility (SLFR) of central bank are considered as policy interest rates.

- Selling securities of central bank at money market on an agreement of repurchasing it is called standing deposit facility rate. If there is an excess liquidity with money market it can be absorbed through repurchasing.

- Also the limit of call money market interest rate is determined by this.

- Purchasing of securities by the central bank on an agreement of reselling is called standing lending facility rate. If there is a shortage of liquidity within market central bank engage in reselling. By this liquidity at money market increases. Therefore, standing lending facility rate shows upper limit of call money market interest rate.

- Commercial bank holding of particular percentage of deposits as cash in hand or as bank money following banking principals is called statutory reserve ratio. Central bank decides to deposit part of commercial banks deposits as 10%, 7% or as 5% at the central bank.
- At the situations where central bank wants a monetary expansion it will reduce statutory reserve ratio and as a result commercial banks' ability to provide credit increases along with increase in commercial banks reserves. Similarly when central bank wants a monetary contraction it will increases statutory reserve ratio. As a result commercial bank reserves decrease causing a reduction in the ability of providing credit.

Example :

Currency of public held at commercial banks	= Rs. 10 000 million
Statutory reserve ratio	= 10%
Reserve should be kept	= 10 000 x 10/100
	= Rs. 10 000 million
When decreasing statutory reserve ratio to 5%	
Reserve should be kept	= 10 000 x 5/100
	= Rs. 500 million

- Due to decrease in statutory reserve ratio money supply increases due to expansion in credit.
- Purchasing and selling securities of central bank at the open market is called open market activities. When central bank purchases securities at the open market central bank's money will flow to the money market.
- When central bank sells securities at the open market money will flow from money market to the central bank
- Due to these two types of policies there can be monetary expansion or monetary contraction can be resulted within the economy.
- Interest rates followed by the central bank when controlling monetary policy are known as policy interest rates. Bank rate, standing deposit facility rate and standing lending facility rate are considered as policy interest rates.

- An interest rare corridor was constructed related to call money market interest rates.. Lower limit of interest rate corridor is the standing deposit facility rate and upper limit of interest rate corridor is standing lending facility rate. The aim of construction of this interest rate corridor by the central bank is to prevent large fluctuations of short term interest rates. Interest rates are subjected to fluctuate within this interest rate corridor and it is a new trend made by the central bank.
- There are several qualitative monetary instruments.
  - Imposing of maximum limit over credit
  - Moral suasion
  - Imposing of preferential interest rates
  - Change of collateral requirements for loans
  - Control of bank credit

Competency 7.0 : Investigates the way of contribution of the banking system to the economic activities by identifying the behaviour of money and general price level.

Competency Level 7.7 : Inquires the functions of the Commercial Bank

Expected Learning Outcomes :

- Defines a Commercial bank
- Explains the main objectives of a Commercial Bank.
- Explains the problems that occur when achieving objectives of Commercial Bank.
- Explains the functions of a commercial Bank
- Presents the balance sheet of a Commercial Bank
- Presents assets structure of a commercial bank.
- Explains the money creation of a Commercial Bank through the balance sheet.

Guidelines to explain subject matters :

- Financial intermediaries or the strong and prominent financial institutions which accept deposits from public with an intension of earning profits with a promise of repaying when asked by a cheques, command or by any other way are known as commercial banks.
- There are two main objectives of a commercial bank.
  - Protecting of liquidity
  - Increasing of profitability
- Liquidity means ability of transferring assets into cash without having a loss. Commercial banks have to maintain liquidity in order to protect publics' belief of ability to withdraw money at any time they want.
- Net interest income obtained after deducting interest rate paid for deposits form the revenue gained by all sorts of lendings is called profitability.
- When commercial banks try to achieve above motioned objectives there can be a controversy between two objectives.
- When commercial banks try to secure liquidity, profitability will be decreased. on the other hand when it tries to secure profitability liquidity will be decreased. Due to this controversy between two objectives. Commercial bank hve to maintain a balance between these two objectives.
- Main functions of commercial banks can be shown as follows.
- Accepting of deposits

- Maintenance of demand deposits or current accounts. Transactions of these accounts are made with cheques.
- Maintenance of saving deposits. Interest rate is paid for these accounts. Depositor can withdraw money at any time he want.
- Maintenance of time deposits. Money can be withdraw after maturity.

- Providing of loans and advances.
- Short term debt
  - overdrafts
  - discounting of bills.
- Providing of agency services (buying and selling securities)
- Providing of mortgage facilities
- Facilitate foreign exchange transactions
- Providing of general utility services.
- Financial situation of a commercial bank held at the last day of the year is shown by the bank's balance sheet. this consist of assets and liabilities.
- Structure of a commercial bank's balance sheet is given below.

Item	**Amount (in million rupees)**
Assets	
1. Liquid assets	xxxx
cash in hand	xxx
cash with the central bank	xxx
cash with other domestic banks	xxx
money at short	xxx
cash in hand and cash with offshore banks	xxx
Treasury bills	xxx
Treasury bonds	xxx
other government securities	xxx
other investments	xxx
discounted bills	xxx
Export bills	xxx
Import bills	xxx

II. Loans and advances	xxxxx
Loans	xxx
Advances	xxx
III. Fixed and other assets	xxx
Liabilities	
I. Capital account	xxx
II. Total deposits	
Demand deposits	xxx
Time and savings deposits	xxx
III. Borrowings	
Domestic borrowings	xxx
Foreign borrowings	xxx
IV. Other liabilities	xxx
Total assets / liabilities	xxxxx

- Structure of a commercial bank can be analyzed using above balance sheet.
- Following cash items of commercial bank's balance sheet are identified as primary reserves.
  - Cash in hand
  - Cash with the central bank
  - Cash with other domestic banks
  - Money at short
  - Cash balance with offshore banks

- Following items of commercial bank's balance sheet are identified as earning assets.
  - Treasury bills
  - Treasury bonds
  - Other government securities

- Discounted bills
- Loans
- Advances

- Part of above assets mentioned below are identified as secondary reserves
  - Government securities
  - Commercial papers
  - Interbank loans
- Creating of multiple of deposits by lending excess reserves is known as money creation.
- Money certain can be done when commercial banks operated as a banking system. Money creation of commercial banks is based on following assumption.
  - Any bank does not maintain excess reserves.
  - After the deposit is made no inflow of money into the banking system or outflow of money form the banking system.
  - All borrowers deposit the total borrowings at another bank.
- Lending of excess reserves by an individual bank and by the banking system is shown below.
  - Lending of excess reserves by operating as an individual bank. Commercial banks maintain particular percentage of their deposits as cash in hand or as bank money following regulations of the central bank and it is known as statuary reserves.

    Example : If demand deposits of a commercial bank equals Rs. 10 000, the amount of statuary reserves that should be kept can be calculated as follows.

    Statutory reserves = Deposits x Needed reserves

    $$= 10\,000 \text{ x } 10000 \times \frac{20}{100}$$

    = Rs. 2000 million

  - Therefore, the amount of excess reserves of this bank will be Rs. 8000 million.

    (Rs. 10 000 – Rs. 2000 = Rs. 8000 million)

  - The maximum amount of loan that the bank can lend is Rs. 8000 million. As the bank operates as an individual bank it can lend only the amount of excess reserves.

Liabilities	Rs.Milion	Assets	Rs.Milion
Deposits	10 000	Resrves Loans	6 000 4 000
Total	10 000	Total	10 000

- If statutory reserve ratio in this bank is 20% reserves required for the deposits is Rs. 2000 million.

  Existing reserves = Rs. Million 6 000

  Required reserves = Rs. $10000 \times \frac{20}{100}$ = Rs. Million 2000

  Excess reserves = 6000 - 2000 = Rs. Million 4 000

- New loans that can be provided by this bank is Rs 4000 million. Commercial bank lend money operating as a banking system.
- Credit creation by commercial banking system is determined by the deposit multiplier. Deposit multiplier shows how many times the amount greater of increase in credit compared to the initial deposit. The value of deposit multiplier equals to the reciprocal of the statutory reserve ratio.

Deposit multiplier (k) = 1/Statutory Reserve Ratio

$$= \frac{1}{r}$$

Example : statutory reserve ratio 20%

k = Deposit multiplier

r = statutory reserve ratio

1 = Constant

Deposit multiplier (k) $= \frac{1}{r}$

$$= \frac{1}{20\%}$$

$$= 1 \times \frac{100}{20}$$

$$= \underline{\underline{5}}$$

* Money creation of the banking system can be shown with the use of consolidated balance sheet of the banking system.

* Assume commercial bank A has Rs. 10 000 million worth of an initial deposit and operates with 20% of statutory reserve ration Balance sheet of this bank is as follows.

A bank's balance sheet

Liabilities	Rs.Million	Assets	Rs.Million
Deposits	10 000	Reserves	2 000
		Loans	8 000
Total	10 000	Total	10 000

* Bank A lend Rs. 8000 million to a particular person and assume this person deposit the money in bank B. Then bank B's balance sheet changed as follows.

A bank's balance sheet

Liabilities	Rs.Million	Assets	Rs.Million
Deposits	8 000	Reserves	1 600
		Loans	6 400
Total	8 000	Total	8 000

* Bank B keep Rs. 1600 million as reserves, which is the 20% of required reserves and lend Rs. 6400 million. Assume the person who borrow this money deposit in bank C. Then bank C's balance sheet changed as follows.

C bank's balance sheet

Liabilities	Rs.Million	Assets	Rs.Million
Deposits	6 400	Reserves	1 280
		Loans	5 120
Total	6 400	Total	6 400

* In this way bank creates money by lending excess reserves after keeping 20% of deposits as reserves.

- Conduct a discussion with students relating to the following situations of each bank's balance sheet.
    - Initial balance sheet
    - Balance sheet after issuing loans.
    - Final balance sheet
- Creating of deposits by the banking system as above is called multiple expansion.
- Multiple expansion of deposits within the commercial banking system is given below.

Bank	**Deposits Rs. Million**	**New reserves Rs. Million**	**Excess Reserves Rs. Million**	**Amount of money lent Rs. Million**
A	10 000	2 000	8 000	8 000
B	8 000	1 600	6 400	6 400
C	6 400	1 280	5 120	5 120
D	5 120	1 040	4 096	4 096
E	4 096	819.20	3276.80	3276.80
.....	....	....	....	......
.....	....	....	....	......
.....	....	....	....	......
Total Banking system	50 000	10 000	40 000	40 000

- Equilibrium of the banking system can be estimated in this way when commercial banks accept deposits and lend money. Total deposits creation would be Rs. 50 000 million and the requires reserves would be Rs. 10 000 million when banking system create money till excess reserves get zero.

  Maximum credit creation = Amount initial excess reserves X Deposit multiplier
  = 8000 X 5
  = 40 000
- When a bank's balance sheet is given, the amount of deposits that can be created can be estimated as follows.

Balance sheet of the bank

Liabilities	Rs.Million	Assets	Rs.Million
Deposits	50 000	Resrves	10 000
		Loans	40 000
Total	50 000	Total	50 000

- Actual expansion of money supply of the economy can be different from the amount shown by the bank's deposit expansion multiplier.
    - Following reasons affect for limitation of the money creation.
    - Flow of currency towards non financial institutions form the banking system.
    - Public cash drain
    - Commercial bank's interest to keep excess reserves
    - Insufficient demand for bank loans

Competency 08 : Analysas the government intervention towards achieving of macroeconomic objectives

Competency level 8.1 : **Investigates the reasons for market failures.**

No. of periods : 08

Expected Learning outcomes :

- Defines market failure.
- Explains the reasons for market failures.
- Explains inefficient allocation of resources.
- Explains macro economic instability.
- Explains Income Distribution Disparities.

Guideline to explain the subject matters :

- Inability of market mechanism to distribute scarce resources toward society's well being is called market failure.
- Following reasons affect for market failure
  1. Inefficiency of resource allocation
  2. Macroeconomic instability
  3. In equal distribution of income
- Act beyond the condition of price equals marginal cost(P = MC) or the condition needed for resources allocation is known as inefficiency of resources allocation.
- Inefficiency of resource allocation occurs due to non-distribution of scare resources of a society in a favourable manner towards the society and following reasons affect for that.
  - Non provision of public goods
  - Non optimal consumption of quasi public goods (semi public goods).
  - Non provision of welfare goods optimally
  - Provision of demerit goods
  - Over utilization of common resources
  - Negligence of externalities
  - Imperfect competition and monopoly situations
  - Imperfect information
- The goods which are collectively consumed are called public goods.
- There are two main characteristics of a public goods.

1. Non excludability – Inability to prevent consumption from the people who do not pay for the considering good
2. Non rivalry – Absence of competition in consumption

- When supplying a pubic good as everyone can consume the goods whether pay for it or not and as the consumer behave according to their self-interest they would not be willing to pay for a public good.
- Also in a market economy which target profits no one allocates resources to produce such a public good.
- Consuming a particular good or service by a person without limiting the consumption of another is identified as non-rivalry of consumption. Due to this reason marginal cost of consumption of an additional consumer will have a zero value.
- Things such as clock towers, national defense, street light and light house are some examples for public goods.
- According to above information it is clear that the market system fails in providing public goods.
- Except traditional public goods there are some other public goods which lie beyond geographical boundaries of a country. These are identified as global public goods.
- Following fearers can be identified with related to a global public good.

1. Non competition in consumption (non rivalry)
2. Non possibility of limiting consumption for the people who do not pay (non excludability)
3. Benefits of such goods can be gained by anyone who lives in the world.

- Things such as knowledge, financial stability, world peace and atmosphere are some examples for global public goods. Non provision of such goods affect for market failure.
- Goods in which competition cannot be seen until it reaches its full capacity and the goods in which consumption can be limited are called quasi public goods.
- Characteristics of a quasi public goods is given below.

1. Absence of competition in consumption until it reaches its capacity (Non rival)
2. Possibility to consumption (Excludable)

- Things such as highways, a cast and museums (Non rival) are examples for quasi goods.
- When supplying quasi-public goods. market charges a price for it. Also as consumption of an additional consumer does not considerably affect over marginal cost till it reaches its maximum capacity and due to the price charged the relevant good or service can be utilized inefficiently. Therefore, this good or service has to be consumed less than the social optimum level.

- Also when supplying quasi public goods producers can charge a price greater than the marginal cost. At those situations the chance to consume the product for the consumer who are willing to pay a price lower than that price will miss the chance to consume the product and due to that reason consumption would takes place lower than the level of social optimum. On such situations market fail due to non optimal consumption of quasi-public goods.
- The goods in which social benefits of consumption exceeded its private benefits are called welfare goods.
- Education, health and sanitary services are some examples for welfare goods.
- Although welfare goods are provided by the market system it does not happen in an optimum way. The reason for that is the consumption decisions related to supplying of those goods are taken only by considering private benefits and costs while disregarding external benefitsfully.
- Due to this reason the consumption of a welfare good would at a level less than the social optimum level. Therefore it effects market failure.
- The goods which generate negative externalities over rest of the society when consuming are called demerit goods.
- Alcohol, cigarettes and drugs are some examples for demerit goods.
- When supplying demerit goods through the market as external costs generate through the consumption of demerit goods are not considered and due to the over production of the good more than the level of social optimum more is consumed than the level of social optimum. Due to this reason of supplying of demerit goods market failures occur.
- The goods in which consumption cannot be limited and the goods there is competition in consumption are called common resources.

  Example : Fisheries, grasslands, atmosphere

Following characteristics can be seen with related to a common resource.

1. Non limitation of consumption (non excludable)
2. Existence of competition in consumption (Rival)

- Any person can reach common resources due to non limitation of consumption and due to existence of competition in consumption. Because of this reason common resources can be over consumed. Also as there is no mechanism generated for the efficient utilization of common resources f a market economy, market fails due to inefficient management of those resources.
- Externalities are the non compensation benefits or losses borne by an external party that is not participating in an economic activity.

Due to a particular production or consumption activity the benefits or losses generated over an external party which are not considered by the person who directly involving in that activity are identified as externalities.

- Externalities are classified as favourable and as unfavourable externalities, due to non considerations of externalities markets fail.
- Price charged for a good under the circumstances of imperfect competition and monopoly will exceeds the marginal cost of a product. Because of this reason the condition that was to be fulfilled for allocation efficiency or the condition of price equals marginal cost (P=MC) will not be satisfied. In this way when consumers being exploited market fails.
- Difficulty to obtain full and correct information through the market which are needed for consumers and producers to make decisions is identified as imperfect information.
- Perfect information will not be received through the market due to following factors.
  - Destroying of true information due to advertising.
  - Difficulty in providing some information related to complicated technology
  - Existence of uncertainties relating to some benefits
- Macroeconomic instability refers to time to time fluctuations occur in an economy.
- At many occasions short term instabilities of economies occur due to fluctuations in aggregate demand which arises with changes in private investment demand.
- Economic instability is shown with an economy's inflation rate and unemployment rate.
- Inequity in income distribution refers to non distribution of aggregate income or resources among total population in a way which provide sufficient level of income for each person to live.
- Personal income level of a market economy depends upon the factors such as amount of labour forgone, level of education, property owned, price of factors of production, entrepreneurial skills and by luck.
- Disparities arises with the household income when generates through above mentioned factors and distribution of resources of an economy is also depends upon that distribution of income. Therefore, more resources are allocated to fulfill demand of high income earners and less resources are allocated to fulfill demand of low income errors.

Competency 08 : Analysis the government intervention towards achieving of macroeconomic objectives

Competency level 8.2 : Examines effects of the externalities for market failure.

No of Periods : 07

Expected Learning outcomes :

- Defines externalities.
- Name generating sources of externalities.
- Presents positive and negative sources of externalities separately with examples.
- Explains market failure occur with externalities using graphs.
- Suggests proposals to prevent market failures arise with externalities

Instructions for Lesson Planning:

- Exhibit two pictures to the class room which show positive and negative externalities.
- Inquire from the students the favourable and unfovourable effects of the things shown in the pictures.
- Conduct a discussion highlighting the facts below.
  - Favourable and non favourable effects results by the things shown in the pictures. Society does not want to pay compensation or expenditure for that.
  - In this way the non compensated advantage or disadvantages arise over an external party due to a particular economic activity are called externalities.
  - Externalities arise in both production and consumption.
- Group students and involve them in the following activity after providing instructions.
- Unfavourable effects or disadvantage cause over an external party who does not directly involves in a particular production activity are known as negative externalities of production.

Example:

- Depositing of silt in tanks due to soil erosion happens with potato cultivation
- Environment all pollution occur when using pesticides for cultivation

Proposed instructions for learning :

- Pay attention to topic received by your group.
  - Externalities in production
  - Externalities in consumption
- To understand the topic received, conduct a discussion.
- Collect information related to the topic by the discussion.
- Using the information found distingushes between favourable externalities and unfovourable externalities.
- Presents your ideas on the importance of preventing externalities and how the externalities can be prevented.
- Prepare to present uour findingd to the whole class cratively.

Guideline to explain subject matters :

- Externalities are the non compensated benefits or costs borne by an external party which arises with a particular production or consumption activity that are not considered by the people who are directly involving in that activity.
- Unfavorable effects over an external party are considered as external costs.
- Favorable effects over an external party are considered as external benefits.
- There are two forms of externalities exist as favorable and as unfavorable. Favorable effects of externalities are identified as positive externalities and unfavorable effects of externalities are identified as negative externalities.
- Externalities are also identified as neighborhood effects.
- There are two forms of externalities exist based on the source it generates.
  - Externalities of production
  - Externalities of consumption
- There are four types of externalities which generate on above two sources.
  - Negative externalities of production
  - Positive externalities of production
  - Negative externalities of consumption
  - Positive externalities of consumption

- Externalities
  - externalities of consumption
    - Negative externalities of consumption
    - Positive externalities of consumption
  - externalities of production
    - Negative externalities of production
    - Positive externalities of production

- Favourable effects or advantage cause over an external party who does not directly involves in a particular production activity are known as positive externalities of production.

Example: .

- Increase in the productivity of bee hiving due to the maintenance of a flower garden.
- Generating of water sources through a project of forestation

- Unfavourable effects or disadvantage cause over an external party who does not directly involves in a particular consumption activity are known as negative externalities of consumption.
  - Negative effect generates over surrounding people when smoking.
  - Unfavorable effect over society by the emission of carbon with the use of motor vehicles.
- Favourable effects or advantage cause over an external party who does not directly involves in a particular consumption activity are known as positive externalities of consumption.
- Favorable effects generate over everyone when using injections to prevent epidemic diseases.
- Favorable effect over society and environment by the use of hybrid vehicles.
- The market is said to be efficient when all costs of a particular production activity is born by the producer or when all benefits of a particular consumption activity is borne by the consumer. However, this does not happen due to externalities.
- A difference between private cost and social cost and a difference between private benefit and social benefit arises with externalities.
- Private costs are borne by producer when they directly involves and private benefits are obtained by the people who directly involves.
- External costs are the costs borne by external parties of a particular production or consumption activity and these costs are borne by external parties who does not directly involve in the production activity.

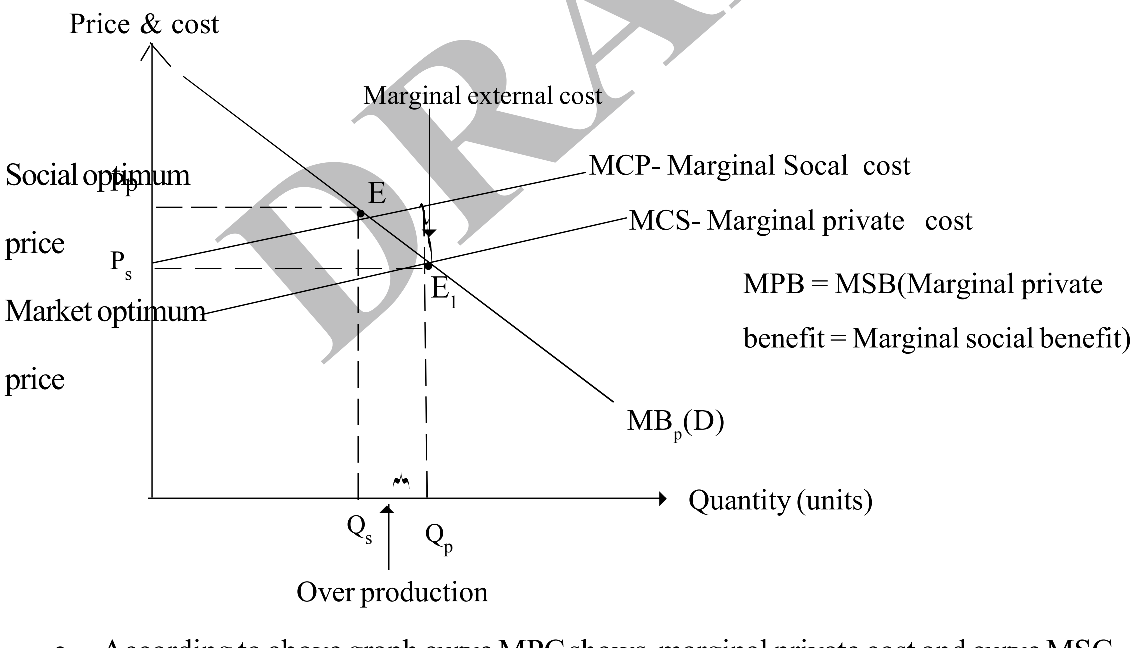
- External benefits are the benefits gained by external parties of a particular production or consumption activities and they do not pay for it.
- The total cost of a particular production or consumption activity borne by the whole society is called social cost. By adjusting external cost to private cost the social cost is determined.

Example : Social Cost = Private cost + External cost

By adjusting external benefits to private benefits, the social benefits are obtained.

Social benefits = Private benefits + External benefits

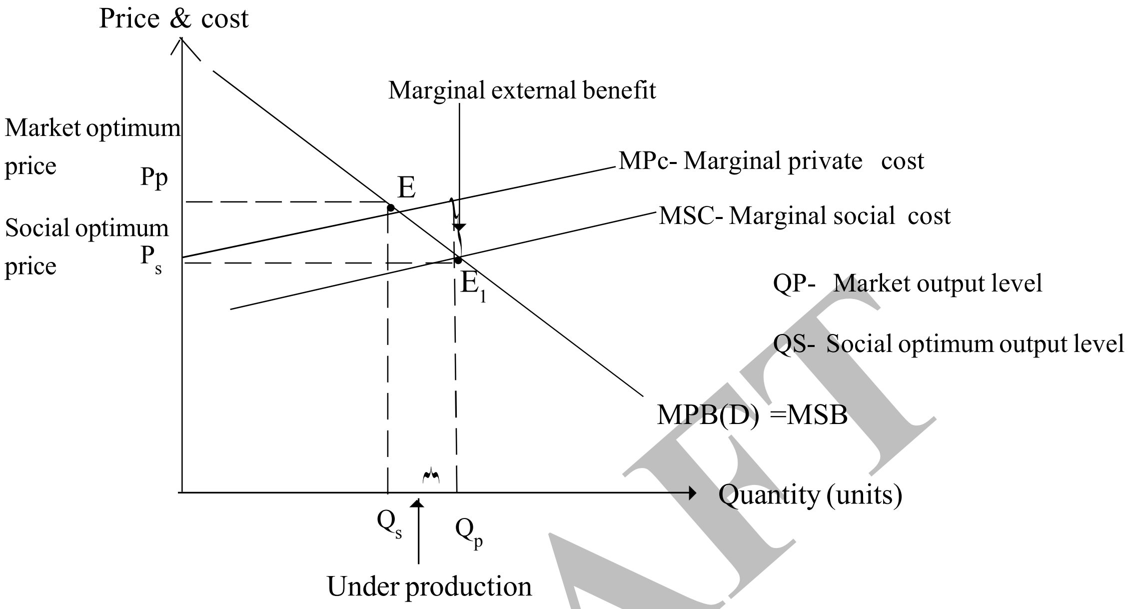
- If there is any difference exist between social cost and private cost or social benefits and private benefits then the price mechanism would not distribute resources in an optimum manner.
- Allocative efficiency of a perfectly competitive market is determined at the situation where price equals marginal cost (P=MC). At the situations where this condition is not fulfilled resources will not be allocated optimally.
- If externalities are any form of positive or negative the result of that will be a mismatch between social cost and private cost or a mismatch between social benefits and private benefits.
- Market failure at occurs with a negative externality of production can be explained by a graph as below.



- According to above graph curve MPC shows marginal private cost and curve MSC shows marginal social cost. Demand for the good is shown by curve MPB. It shows marginal social benefit.
- Resources of a society is allocated optimally if production is carry out with marginal social cost equals marginal social benefit.

- When there are negative externalities of production marginal social cost will exceed marginal social benefit, Marginal social cost (MCs) curve of the above graph lies above the marginal private cost (MCP) curve. Private output level of the graph (market equilibrium output) Qp exceeds the social optimum output (Qs); (Therefore, it will result an over production.)

- Market failure occurs with positive externality of production can be explained by a graph as below.

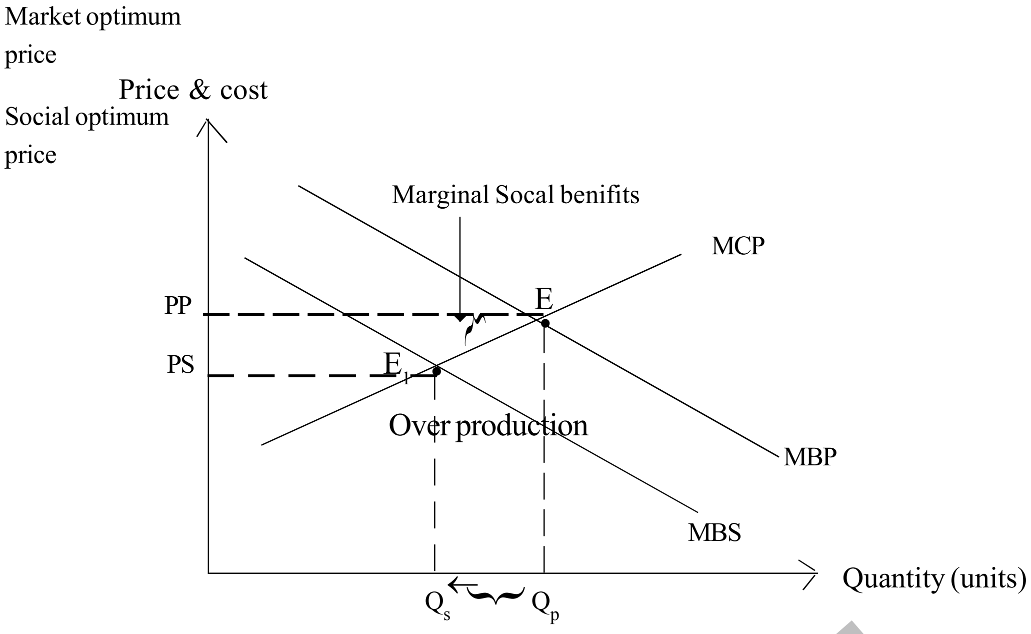


- At a situation of positive externality of production market output level will be lower than the social optimum output level.(Therefore, it will result an under production).

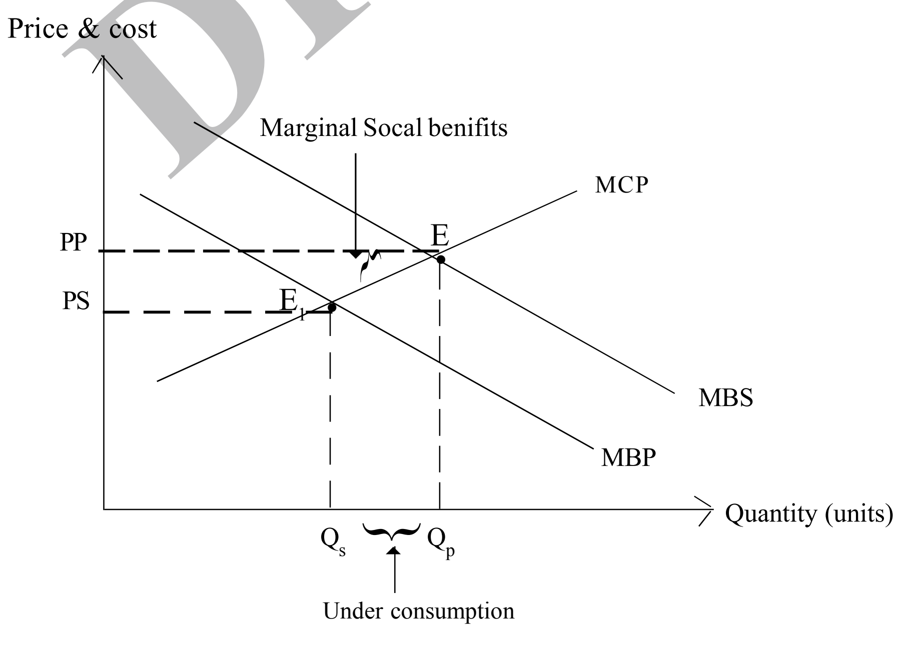
- MPB curve or demand curve shows how consumers determine their demand on private benefits.

- Marginal private cost curve exceeds marginal social cost curve. Social optimum output is determined at the point where marginal social cost curve interests marginal social benefits curve at Q_s point.

- Market failure occurs with negative externality of production can be explained as a graph as below.



- In the above graph MPB curve shows marginal private benefits and MSB shows marginal social benefits. MSCp is the supply curve.
- The consumer who consume above good considers only private benefits and private costs. His consumption level is shown by Qp, However, social optimum level is Qs. As price mechanism does not shows optimum consumption level it will result an over consumption. It shows an inefficiency in resource allocation.
- Market failure occurs with positive externality of consumption can be explained by a graph.



- At the presence of positive externalities of consumption marginal social benefits will exceed marginal private benefits. Due to the fact that market equilibrium output level will be lower than the social optimum output level.

- Steps that can be taken to eliminate market inefficiency caused by the externalities.

  - Imposing of environmental taxes
  - Issuing of license
  - Providing of subsides for positive externalities
  - Internalization of externalities (imposing direct control policies of the government)
  - Personal bargaining
  - Deciding of a fine by the government.

Competency 08 : Analysis the government intervention towards achieving of macroeconomic objectives

Competency level 8.3 : Investigates the role of government within a market economy.

No of Periods : 07

Expected Learning outcomes :

- Introduces the role of government within a market economy.
- Explains the role of government within a market economy.
- Describes government failure occur when preforming duty of the government within a market economy.
- Present reasons for government failure.

Guideline to explain subject matters :

- Role of government within a market economy can be shown as follows.
  - Efficient allocation of resources
  - Fair distribution of income and wealth
  - Establishing of macroeconomic stability
  - Establishing of economic growth and sustainable development
- Following steps are being implemented by the government to eliminate market inefficiencies.
  - When providing public goods as price cannot be charged for the good as profit cannot be gained market system does not provide public goods. Due to this reason government intervenes to the market.
  - As quasi pubic goods are not sufficiently provided by the market system government intervenes into the market.
  - As market does not provide welfare goods sufficiently there will be an under consumption of these goods. Therefore, to provide welfare goods government intervenes to the market.
  - A market system over produces demerit goods. Therefore, government has to limit them. Example : Drugs
- As market does not provide welfare goods sufficiently will be an under consumption of these goods. Therefore, to provide welfare goods government intervenes to the market.
- A market system over produces steps are taken by the government.
  - Redistribute income and wealth

- Improving limits over wealth accumulation
- Reformation of lands

- To maintain macroeconomic to eliminate inflation and unemployment government use fiscal policy.
- Government also set to improve economic growth and sustainable development.
- Also government provide institutional infrastructure such as legal system, courts, regulatory, child protection and adult protection.
- When government to correct market failures then it will lead to various forms of inefficiencies and inequalities. This situation is identified as government failures. Following are the factors affecting for government failure.
- Rigidities in government operation
  one of the unfavorable effects of government intervention is the difficulty to change government policies according to the frequent changes of environment.
- Political self interest
- Resources are being wasted when politicians and state officials act according to their self interest.
  Example : When constructing highways, hospitals and schools focusing on political needs.
- Short term vision of government policies
  When finding solutions for various problems it will consider only short term while disregarding long run. Therefore policies needed for long term social progress will not be implemented.
- Making of policies based on imperfect information.
  Due to this imperfect information government policies will be inefficient.
- Unfavourable effect over incentives
- Steps followed by the government to establish fair distribution of income and wealth affects over incentives and productivity in an unfavourable manner.
- Act to prevent from government intervention
- When people and situations act to prevent from various government rules and regulations it can generate hidden economics.
- Increase of administration cost.
  Government intervention within an economy can be very expensive. When implementing rules and regulations inefficiencies can arise as expected social benefits not being greater.
- Increase of administration cost
- Government intervention within an economy can be very expensive. When implementing rules and regulations inefficiencies can arise expected social benefits not being greater.

Competency 08 : Analysis the government intervention towards achieving of macroeconomic objectives.

Competency level 8.4 : Analysis Sri Lanka's government revenue by investigating classification and principles of taxes.

Number of periods : 10

Learning outcomes :

- Defines fiscal policy.
- Explains objectives of fiscal policy.
- Names instruments of fiscal policy.
- Names main sources of government revenue.
- Explains objectives of taxation.
- Describes tax principles.
- Classifies taxes on various criteria.
- Explains the concepts of collection of taxes incidence of tax.
- Search economic effect of taxation.
- Presents components of non-tax revenue.
- Investigates recent trends of Sri Lanka's government revenue.

Guideline to explain subject matters :

- Make changes related to government expenditures, revenue and borrowings in order to achieve macroeconomic objectives is known as fiscal policy.
- Government taxes, government expenditure and public debt are the fiscal instruments.
- Mention there are two main sources of government revenue. They are as follows.
    - Tax revenue
    - Non-tax revenue
- Explains objectives of taxation as follows
    - Minimize inequality in distribution of income and wealth
    - Management of resources to improve efficiency
    - Discouraging of the consumption of demerit goods which borne a high social cost
    - Affect over aggregate demand
    - Affect over aggregate supply

- Principle s of taxation can be presented as follows.
  - Equity
  - Economical
  - Convenience
  - Certainty
  - efficiency
  - flexibility
- Two conditions should be fulfilled to achieve the tax principle of equity.
  - Horizontal equity
  - Vertical equity
- The need to treat equally for the people with similar economic capabilities called horizontal equity. Which means people with similar level of income should borne similar level of tax burden.
- The need to treat differently for the people with different economic capabilities is called vertical equity. Which means more tax burden should borne as income increases.
- For a fair system of taxation two main principles are stated within economic theory. They are as follows.
  1. Principle of benefit
  2. Principle of ability to pay
- Principle of benefit refers to that the taxes should be paid to the government according to the amount of services receive by the government.
- Principle of ability to pay refers to that the taxes should be charged according to a person's ability to pay taxes.

The principle of economical means that the expenditure borne by the person in paying taxes and the cost to the government in collecting taxes should be minimized. These expenditure are classified into two types as administration and compliance.

Administration cost : Expenditure borne by government when collecting taxes

Compliance cost : Cost borne by tax payers

The intention of this is that the revenue gain from taxes should exceed the value of expenditure made to collect taxes. If not it will be unable to earn revenue to the government.

Principle of convenience :

That is the tax system should be simple. Simplicity of a tax is shown by whether the tax prayers pay taxes properly or not or by whether many people try to avoid paying taxes or not.

Principle of certainty :

Means that the tax system should not change frequently and suddenly. It refers to the idea that the tax payers should have the ability to predict their tax burden they should borne at future. Also the taxes that should pay at future should be certain for investment purposes.

Principle of efficiency :

Refers to the tax system taxes should be charged in a way it should not affect over resource allocation process. This principle also states that surplus amount of taxes should not be charged and distortions should be minimized.

Principle of flexibility refers to the idea of possibility to adjust taxes according to the timely changes occur within economic process.

- There are two types of taxes based on the possibility to shift the tax burden
  - Direct taxes
  - Indirect taxes
- Direct taxes are the taxes paid by a person or paid by a institution who should be liable to pay the tax and who should borne the tax burden without passing to another.

  Example : income taxes, Property taxes
- If there is any possibility to shift the tax burden then it is called an indirect tax. In this situation there is a clear difference exist between the legal tax payer and the actual tax payer.

  Example : Sales tax , Custom duty, VAT
- The source that subjected to the tax is known as tax source.

  Taxes are classified based on tax source.

  1. Income tax
  2. Consumption tax
  3. Wealth tax
  4. Import and export tariffs

- If the person who should legally liable to pay the tax can pass the burden of tax to someone else it is called shift of a tax.
- Indirect taxes are included to a person's day to day expenditures. Also the person or institution who pay the tax legally will shift the tax burden to their customers who purchase products and services.
- People who consume goods and services will pay tax to the government finally.
- Tax compliance is the definite identification of which person will borne the tax burden after imposing a tax. In other words search of how the tax burden affects over various units of the economy after imposing a tax. Following that there are two forms of tax compliance.
    1. Legal tax compliance
    2. Economic tax compliance
- Legal tax compliance means to which person the tax is legally directed.
- Actual burden of tax is the economic tax compliance.
- Taxes can be classified into three types depending on the rate of tax charged.
    1. Progressive tax
    2. Proportional tax
    3. Regressive tax
- Charging of a tax at an increasing rate with the increasing of a tax base is identified as a progressive tax system.

  Example : Income tax
- As income level increases increased proportion of tax is charged. It is shown by the table below.

Level of income	**Rate of tax**
Up to Rs. 300 000	No. tax
300 000 – 600 000	5%
600 000- 800 000	10%
800 000 – 1 000 000	10%
1 000 000 – 1 200 000	20%

- As tax base increases both marginal rate of tax and average rate of tax increases.
- If marginal tax rate is not changed with a change in tax base then it is called a proportional tax.

  Example : Imposing of 20% tax rate for each and every person.

  As same level of tax is charged at any level of income, marginal rate of tax will be equal to average rate of tax.

•

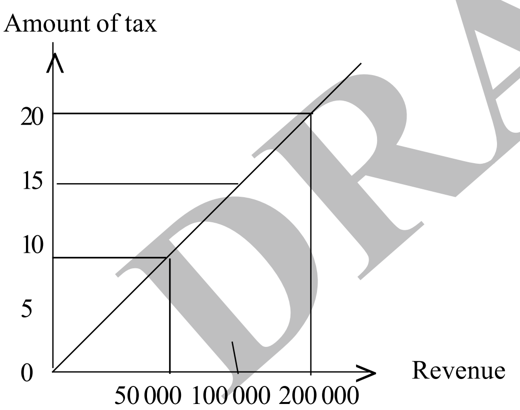
- If tax rate decreases with increase in tax base it is known as regressive tax.
- As the value of tax base increases, both marginal rate of tax and average rate of tax decreases with regressive tax system.
- As tax base increase marginal rate of tax lies above average rate of tax.

  Example : Sales tax

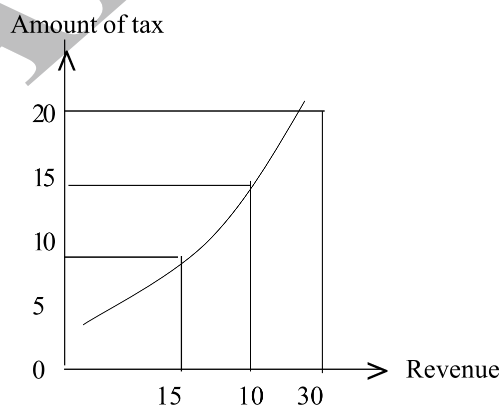
• Change in tax along with change in tax base can be presented with a schedule as below.

Level of income	Proportional tax		Regressive tax		Progressive tax	
	Amount of tax	Percentage of income	Amount of tax	Percentage income	ofAmount of tax	Percentage of income
50 000	12 500	25%	15 000	30%	10 000	20%
100 000	25 000	25%	25 000	25%	30 000	30%
200 000	50 000	25%	40 000	20%	80 000	40%

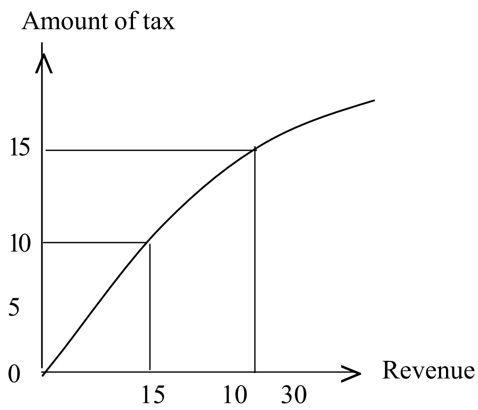
- Change in tax rate following a change in tax base can be shown by the graphs below.



(i) Proportional tax



(ii) Progressive tax



(iii) Regressive tax

- Although tax is imposed as a way of earning revenue to the government to achieve macroeconomic objectives there are many economic effects of it. It affects over various parties as follows.

1. Effect over investments :

When taxes are charged from the investors by the government, investments can be discouraged due to increase in cost of investors with an apparent decrease in profits. However, investments are encouraged with tax concessions and tax reliefs. Also by imposing and increasing of import tariffs domestic investors are encouraged.

2. Effect over production :

When a tax is imposed over producers their profit will decrease due to increase in cost of production.

3. Effect over consumption

Tax system of a country affects over consumption in various ways. When government impose taxes over goods, price of goods increase and the consumption level is decreased. When income taxes are imposed it will affect disposable income and as a result. Consumption is decreased.

4. Effect over price level

When government impose taxes over goods as prices of goods increase price level of the country is increased. In this way due to increase in price level and increase of cost of living of the country inflation occurs.

5. Effect over international trade :

Impose of tariffs directly affects over international trade. Imports and exports are discouraged with increase of tariff rates and imports and exports are encouaged with decrease of tariff rates.

6. Effect over income distribution

By imposing taxes over rich people and providing tem in the form of subsides to poor, inequality of income distribution of a country is minimized. In this regard imposing a low tax over essentials and imposing a high tax rate over luxury goods will minimize in equality in income distribution of a country.

7. Effect over savings

When imposing taxes over goods disposible income decrease with increase in cost of living. As a result savings are discouraged.

Competency 08 : Analysis the government intervention towards achieving of macroeconomic objectives

Competency level 8.5 : Analyses the Composition of Government Expenditure and its recent trends.

No. of periods : 08

Expected Learning outcomes :

- Explains the reasons for government expenditure.
- Classifies government expenditure based on economic classification.
- Explains the components of economic classification.
- Examines composition of government expenditure and its trends.
- Explains economic consequences of government expenditure.

Guidance to explain subject matters :

- Expenditure made by government to achieve economic objectives is called government expenditures
- Following factors affect government expenditures
  - Make utilization of scare resources efficient
  - Minimize in equal distribution of income
  - Protection of law and peace
  - Running institutions that provide public services which are not provided by the private sector
  - Economic growth and development
- Government expenditures can be classified mainly into three types.

  1. Recurrent expenditure
  2. Capital investment expenditures
  3. Net lending
- Recurrent expenditures are the expenditures hat should made again and again. Expenditures such as transfer payments and the day to day expenditures at a particular year are included in current expenditures. It is an expenditure that provides benefits to the economy during the time of spending.

  Example : wages of employees

  Food subsidies

  Pensions

  Transportation cost

- Capital expenditures are the expenditures made to purchase goods that exist normally more than a year and the expenditures made to generate capital resources and the expenditures of reformation of capital.

Example : purchasing of machinery

Construction of buildings

Purchasing of vehicles

Construction of highways

- Expenditures of government which are not included in current and capital expenditures is called net lending . Net lending provided by advance accounts, receipts of loans and lending s to over government entrepreneurs are included in net lending.
- Although government expenditures are broadly classified as above with an intention of identifying various expenditure components within each type of expenditure, current and capital expenditures are classified based on two main classifications.

1. Economic classification
2. Functional classification

- Government expenditure based on economic classification is as follows.

Economic classification of government expenditure

- Current expenditures
  - Expenditure On goods and services
  - Interest payments
  - current transfers
- Capital expenditures
  - Acquisition of real capital
  - Capital Transfer
  - Under expenditure

- Expenditure on goods and services under current expenditures means the expenditures made to provide and maintain various public services for the public. Benefits of these expenditures are limited for a year.

Examples : National defense, school education, hospital health services, Transportation services

- Interest payments are the expenditures made to pay interest for both domestic and foreign borrowings. As an individual component it has the largest value of government expenditures. When interest rate increases public savings decreases and economic growth will be limited due to apparent decrease in investments. considering interest payment as a transfer it is not included to national accounts.
- Current transfers and subsidies are the subsidies provided by the government to various government institutions and to the household sector.
- Subsides provided over government institutions are the funds provided to maintain loss making government entrepreneurs.

Example : Subsides provided to Sri Lanka Ports Authority, National Water supply and Drainage Board, Sri Lanka Electricity Board and Sri Lanka Petroleum Corporation.

- Examples for the subsides provided to house hold sector are given below.
  - Samurdhi
  - Pension (largest value of government subsidies)
  - Food stamps
  - Food subsidy
  - School text books, uniforms, lunch, bus season
  - Fertilizer subsidy
- Increases in current transfers limit the potential to allocated resources for other dominant sectors of the economy. Also it will decrease public savings and limit investments with broadening budget deficit.
- Expenditure of acquisition of real capital under investment expenditures refers to the amount of money invested by the central government directly for capital formation.

  Example : allocation of money by the government to construct expressways.
- Money provided to various government institutions, corporations and provincial councils for capital formation which is not regained by the government is called capital transfers.

Example : Providing money by the government for provincial councils to construct school buildings.

- Inclusion of capital balances to expenditure estimates when expecting estimated capital expenditures for a given year has no potential to spent totally it is then called under expenditures.
- Through under expenditures the value of capital expenditure is shown as a lower value and it is also used as a strategy of showing the value of budget deficit lower at the situations where expected expenditure are extremely difficult to cover by government revenue.
- Composition of Sri Lanka's government expenditure following economic classification is given below.

Expenditure and net lending based on economic classification

Item	2014 (Rs. million)	2015 (Rs. million)	2016 (Rs. million)
Recurrent expenditures	1,322,898	1,701,658	1,757,782
Expenditure on goods and services	568,829	72,563	746,250
Interest payments	**436,395**	**509,674**	**610,895**
Current transfers and subsidies	317,674	419,420	400,637
Capital expenditures	459,855	588,175	577,036
Acquisition of real assets	252,303	313,260	328,202
Capital transfers	07,551	274,916	248,834
Lending minus repayments	13,112	561	-934
Total expenditure and net lending	1,795,865	2,290,394	2,333,883

Recent tends of government expenditures can be stated as follows;

- Rigidity of government expenditures can be seen at short run.
- 60% of government expenditures are consist with interest payments, wages and transfers.
- 2/3 of transfers payments consists with pensions.
- Increase in expenditure for wages due to 13% of Sri Lanka's labour force consists with government employees
- Consequences of government expenditures can be shown as follow.
    - Decrease of public savings due to increase in current expenditure
    - Limitation of public investments.
    - Increase of public borrowing s due to increase in budget deficit.
    - Due to the loans obtained to settle government expenditures the amount of money left for the private sector with get limited and to private sector investments decrease due to increase in make interest rates.
    - Evolving of balance payments problems.

Competency 8.0 : Investigates government intervention to achieve macro economic objectives.

Competency level 8.6 : Analysis the nature of Government Budget and budgetary policies

No. of periods : 08

Learning outcomes :

- Defines government budget.
- Presents deficit, surplus and balanced budgets.
- Presents structure of government budget.
- Describes the importance of the surplus in current account.
- Explains primary account balance.
- Explains the differences between Sri Lankan's net cash deficit and overall balance.
- Describes expansionary government budgetary policies.
- Describes contractionary government budgetary policies.

Guidance to explain subject matters :

- The document which includes all the expected expenditures of government for the next financial year and the one which includes the ways of collecting revenue to meet these expenditures and which is then presented to the parliament and approved by them is called the government budget.
- It can be stated as an important document which includes government's future financial plans and future vision.
- An act called appropriation act exists with related to government budget.
- An appropriate act is the act which mentioned the expected expenditures of government for the next financial year separately under departments and ministries and also which includes revenue to meet these expenditures. In addition to that it shows how the gap between revenue and expenditure is fulfilled.
- If a particular ministry need some more money after approval of the appropriation act, the estimate presented to the parliament by the relevant minister for their approval is called supplementary estimate.
- Due to an unexpected situation (war, election) if it is difficult to present appropriate act to the parliament and to get the approval from the parliament at the right time till it approves the temporary schedule presented to the parliament to pay the expenditures of each

ministry for the next financial year from the government's consolidated fund is called vote on account.

- There is no deficit or surplus in vote on account as it only includes expenditures.
- Also as it is presented only for a short period of 3 or 4 months it does not include any new policies or projects.
- Interim budget is different from a vote on account.
- Interim budget is a complete budget that includes both revenue and expenditure.
- At a situation of one budget is already approved by one government and due to the appointment of new government the new budget presented to the parliament with amendments to the existing one during a year is called an internal budget.
- There is a difference exists between a personal budget and the government budget.
- A personal budget mention revenue sources first and then plan the expenditures.
- However, a government budget first estimated expected expenditures and then decides ways to meet those expenditures.
- In a government budget the balance is also obtained by adjusting government revenue to government expenditures. Based on the balance of budget three budgetary concepts are identified.

  1, deficit budget

  2. Surplus budget

  3. Balanced budget
- If government expenditures are greater than government revenue it is a deficit budget.
- If government expenditures are lower than government revenue it is a surplus budget.
- If government expenditures are equals to government revenue it is a balanced budget.
- Structure of a government budget which includes hypothetical data is given below.

Government budget schedule

Item	Rs. in million
Total revenue and grants	170 000
Total revenue	165 000
Tax revenue	150 000
Non tax revenue	15 000
Grants	5 000
Expenditure and lending minus repayments	200 000
Recurrent	175 000
Capital and net lending	25 000
Public investment	20 000
Current account surplus / deficit	100 000
Primary account surplus / deficit	9 000
Overall fiscal surplus / deficit	30 000

- Some measures are used to investigate the nature of a government budget.
  - Balance of current account
  - Balance of primary account
  - Overall balance
  - Net cash deficit

- The balance obtained after deducting recurrent expenditures from total government revenue (Except grants) is called current account balance.
- According to above budget schedule

  Total revenue = 185 000

  Recurrent expenditure = 175 000

  Current account balance = 180 000 – 175 000

  = - 500

- The balance obtained after deducting recurrent expenditure and capital expenditures from total government revenue (Except grants) is called overall balance.

Total revenue	= 170 000
Total expenditures	= 200 000
Current account balance	= 170 000 – 200 000
	= - 30 000

- The balance obtained after deducting recurrent expenditure excluding interest payment for public debt plus capital expenditures from total government revenue including grants and receipts is called primary account balance.
- Balance of primary account can also be obtained by deducting interest payments from overall balance.
- Because of this the difference between overall balance and primary account balance will equal to the amount of interest payments for public debt.

According to above schedule.

Overall balance	= -30 000
Primary account balance	= - 9000
Interest payments	= - 30 000 – (- 9000)
	= - 21 000

- The difference between total government revenue (Including grants and receipts) and the government expenditure after deducting amortization payments is called net cash deficit (Budget deficit obtained excluding repayments of debt installments is the net cash deficit)

Example :

Total revenue	= Rs. 500 million
(including grants and receipts)	
Total government expenditure	= Rs. 6100 million
Overall balance	= Rs. 5 000 – 6 100 million
Amortization payments	= Rs. 500 million
Net cash deficit	= Rs. – 1 100 – (500)
	= Rs. 600 million

- According to this amortization payment is the difference between net cash deficit and overall balance of the budget.

- According to economic classification of government expenditures amortization payments are not included to capital expenditures of the government. The reason is that it is not an expenditure occur due to the expenditures made during the considering year. However, when mentioning government expenditures following accounting approach domestic and foreign amortization payment are included to capital expenditures. Because of this reason when estimating net cash deficit amortization payments are deducted from overall balance of the budget.

- There are two types of budgetary policies

  1. Expansionary budgetary policy
  2. Contractionary budgetary policy

- If there is an inflationary situation occur due to an increase in money supply which results with government debt obtained to fulfill budget deficit. It is called an expansionary budgetary policy.

  Example :

  1. Government borrow money from central bank
  2. Government borrow money from commercial banks

- When finance budget deficit by borrowing money form central bank and commercial banks money supply of the country expands.
- Due to this reason aggregate expenditures exceed aggregate revenue and an inflationary situation occurs.
- If money supply does not increase by the government debt that obtain to fulfill budget deficit it is considered as constractionay budgetary policy.

  Examples :

  - Borrowing money from National Savings Bank
  - Borrowing money from Employee Provident Fund
  - Borrowing money from the public

- Borrowing money from above mentioned sources will not increase the money supply of the country. Therefore, it will not create any inflationary situation.

Competency 08 : Analysis the government intervention towards achieving of macroeconomic objectives

Competency level 8.7 : Inquires financing budget deficit and composition of government debt.

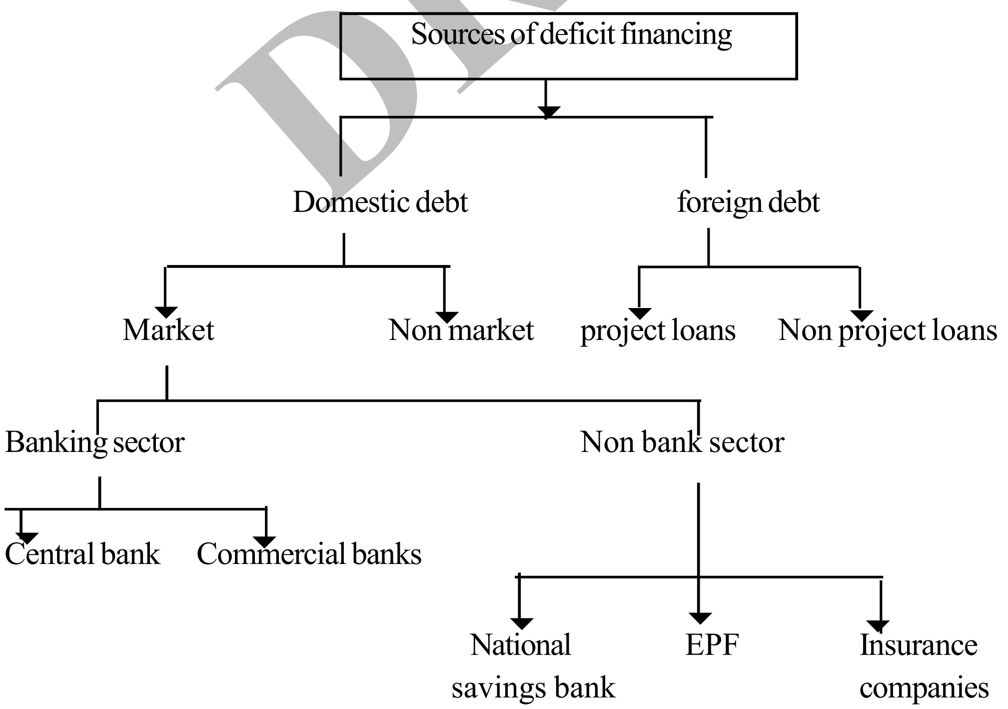
No. of Periods : 08

Learning outcomes :

- Present sources of deficit financing separately.
- Describes consequences of the domestic and foreign sources of budget deficit financing
- Presents competition of public debt.
- Presents recent trends of public debt in Sri Lanka with the use of central bank report.
- Describes problems of borrowing money through domestic sources.
- Investigates economic consequences of increasing public debt.

Guidance to explain subject matters :

- There are situations where expected expenditures of the government for the next financial year exceeds expected government revenue. When government expenditures exceed government revenue the main source used by the government to finance budget deficit is the public borrowings.
- Recently following sources are used by the Sri Lankan government for deficit financing.



- Two main sources are used for deficit financing
  - Domestic sources
  - Foreign sources

- Domestic sources are again two types
  - Market sources
  - Non market sources
- If government borrow money through financial instruments of treasury bills and treasury bonds it is the borrowing of money through market sources.
- Borrowing money without intervention to the financial market is the borrowing money from non – market sources.
- Domestic market sources again classify into two types
  - Borrowing money from the banking system
  - Borrowing money from the non-banking sources
- Loans obtained from the central bank and from commercial banks are identified as loans obtained from the banking system. It is also called as borrowing money from inflationary sources. When borrowing money from banking. Sector to fulfill budget deficit it will occur money expansion within the economy.
- Borrowing money from non bank institutions which cannot create money such as national savings bank, development banks, insurance companies, employee provident fund and trust fund is called borrowings from non bank sector.
- When borrowing money from non bank sector as it cannot create money it does not affects over money supply.
- Obtaining money from the deposits and surplus funds of government institutions temporarily to finance the budget deficit is called borrowing from non market sector. There are few such sources.
  - Administrative loans
  - Deposits at treasury (Central bank advances)
  - Other deposits
- There are two foreign sources of financing budget deficit.
  - Foreign loans
  - Foreign aids
- Foreign loans are more important than foreign aids in financing budget deficit.

- Financing budget deficit by the loans granted from a foreign government, international financial institutions or international markets are called foreign debt sources. Loans obtained through this way again classified as concessionary and as non-concessionary based on the conditions of the debt obtained.
- Concessionary loans are provided without conditions or at a low interest rate or with a grace period.
- Non-Concessionary loans also called as commercial loans. Loans obtained at a high interest rate and under various conditions are identified as non-concessionary loans.
- How borrowing money from domestic and foreign sources affect over Sri Lanka economy is explained by the economic consequences of public debt. These economic consequences depend upon the nature of the debt source that used to fulfill budget deficit.
- Two unfavorable effects generate over the economy with contnuing budget deficit and increase in public debt.
    - Increase in market interest rate
    - Creating of a shortage of domestic financial resources available for the private sector investments.
- Because of the competitiveness arise when government borrow money form financial market and private sector demand loans from commercial banks, credit interest rate increases. Moreover, unfavorable effects are generated over the economy when borrowing money from the central bank and commercial banks.
- Private sector investments are discouraged when government sector and private sector compete for limited amount of financial resources.
- Those unfavouable effects are generated because of commercial banks and the central bank being inflationary sources.
- Borrowing money through non-market sources to fulfill budget deficit do not generate such unfavorable effects.

  Example : Use of surplus funds of various government institutions at the end of year to finance budget deficit is called administrative loans . In this situation there is neither expansion in money supply nor any inflationary effect.
- There can be a monetary expansion with foreign loans and foreign aids as well. As the amount of foreign assets increase when using foreign sources to finance budget deficit it generates an inflationary effect over money supply. Also when converting foreign loans and aids into domestic currency inflationary effects can be occurred.
- The composition of public debt can be explained by analyzing the following statistical schedule.

Item	Year	
	2014 (Rs. Million)	2015 (Rs. Million)
By instrument		
• Treasury bonds	2 844 054	3 305 248
• Treasury bills	694 767	658 240
• Rupee loans	55 518	24 088
• Central bank advances	143 898	151 132
• Sri Lanka development bonds	391 083	668 458
• Other	148 463	152 031
• Total debt	4 277 783	4 959 196
By institution		
• Banking sector	1 669 882	1 924 036
• Central Bank	267 677	256 050
• Commercial bank	1 402 205	1 667 986
• Non-bank sector		
EPF and pension fund	1 474 560	1 655 336
Insurance fund	30 536	42 036
Savings institutions	379 877	428 236
Administrative loans	221 584	252 615
Private entrepreneurial sector	500 773	656 367
Other	570	570
Total debt	4 277 783	4 959 196

Source - Central bank report

- When analyzing public debt by instrument the largest amount of borrowings comes from treasury bonds.
- When considering public debt by institution the highest contribution come from non-bank sector than the banking sector.
- Within non-bank sector borrowing from EPF and pension fund recorded the highest value. At 2016 borrowing from that sector showed an improvement.
- Domestic debt as a percentage of gross domestic product in year 2015 was 44.3% and foreign debt was 31.7%. The amount of foreign debt in 2015 showed a decline compared to the year 2000.
- Concessionary foreign loans and commercial loans both showed an improvement. It is explained by the schedule below.

Item by the type of loan	**2015 (Rs. Million)**
Concessionary loans	1 729 895
Non-concessionary loans	507 047
Commercial loans	1 S307 087
Total foreign loans	3 544 031

- In 2016 the total debt obtained by Sri Lanka showed a high growth and the value as a percentage of gross domestic product decreased compared to 2000. It is explained by the schedule below.

Year	Total debt	Budjet depiciteG.D.P	% G.D.P
2000	1 218 700	- 9.5	96.9
2005	222 241	- 7.0	90.6
2008	3 588 962	- 7.0	81.4
2009	461 422	- 9.9	86.2
2010	4 590 245	- 7.0	71.6
2013	4 590 245	- 5.4	70.8
2014	7 390 899	- 5.7	70.7
2015	8 503 227	- 7.4	76.0

Source : Central Bank Report

- It is showed a relationship between total budget deficit and total public debt of Sri Lanka. When budget deficit increases total public debt increases and when budget deficit decreases total public debt also decreases.

- Although total debt shows a higher value, the reason to show a lower value as a percentage of gross domestic product is that the a high growth of gross domestic product during 2016 compared to year 2000.

- Total debt service payment in Sri Lanka also showed a lower value. During 2015 the value decreased to 90.6 compared to the value of 96.8 recorded in 2012.

- Some problems arise when borrowing money from domestic sources.

- Due to the fact that more money has borrowed through domestic sources and due to increase in the amount of domestic debt the interest that has to be paid had increased. Interest payment for domestic debt as a percentage of recurrent expenditures is shown below.

Year	2012	2013	2014	2015
Interest payment for domestic debt	28.1%	29.4%	24.8%	23.2%

- Recurrent expenditures increased due to the interest payment for domestic debt. It has affected to decrease the value of public savings due to the deficit in current account.

- From domestic debt sources, borrowing from banking sector generates inflationary effects. Also due to increase in the prices of goods and services inflationary situation occurs within the economy.

- Also due to increase in domestic debt and borrowing through banking sector while private sector demand loans from commercial banks it affects to incase interest rate of the economy.

- The effect over the economy that arise with increase in public debt can be stated as follows.

  - Decrease in public savings and investments due to increase interest payment which resulted with large amount of borrowings.

  - Increase in government expenditure with increase in public debt and debt service payment.

  - Fiscal management is being extremely difficult.

- Due to increase in credit interest rate and due to the absence of the flow of resources to the private sector creating of crowding out effect over the economy.
- It should face for an international debt crisis due to borrowing of foreign loans to fulfill public debt.
- Increase in the prices of goods and services due to borrowing of money from expansionary sources of debt.
- Arising of balance of payment problems due to increase in foreign debt installment and the interest.
- Pass of debt burden from present generation to the future generation.

Competency 08 : Analysis the government intervention towards achieving of macroeconomic objectives

Competency 8.8 : Inquires supply promotion policies and procedures with related to Sri Lanka.

No. of Periods : 08

Expected Learning outcomes

- Defines supply side economic policies.
- Names the instruments of supply side economic policies.
- Explains with examples, how supply promotions policies are implemented in Sri Lanka.
- Inquires economic consequences of supply side policies.

Guidance to explain subject matters :

- Supply side policies are the microeconomic fiscal policies. The objective of supply side policy is to speed up economic growth through increase of economic efficiency in the market.
- When supply side policies are implemented productivity increases with increase in investment due to decrease in cost of production. Also supply side policies are used to direct main macroeconomic variables towards expected level.
- Instruments of supply side policies :
  - Tax reforms
  - Privatization
  - Deregulation
  - Labour market reforms
  - Capital market reforms
- Making changes of the tax system in a way it provides an incentive to increase production is known as tax reforms.
- Imposing of taxes variously affect over activities of the market.
- Because of taxes production, consumption investment and savings will not be reached its optimum level.
- When imposing taxes to minimize the effect over market competiveness it should impose with an incentive.

  Example : Providing of tax reliefs
  Tax wave off
  Reducing of taxes

Examples :

- Improving productivity of capital
- Encouraging foreign direct investments
- Obtaining concessionary foreign loans
- Act according to increase savings

- Increase of productivity through increase in investment by above reforms is favourable. However, there can be unfavorable situations as well.

  Examples :

  - Flow of profits and dividends to foreign countries when foreign investments are increased.
  - Huge amount of money is spent as debt installment and as interest.
  - Decrease in recurrent expenditures of the government will be t is unfavourable for social welfare.
  - When using supply side policy reforms it should use minimizing the unfavorabe effects of it.

Competency 9.0 : Explores how international trade influences on Sri Lankan economy by analysing the theoretical basis of International trade.

Competency level 9.1 : Analysis the factors of basis of international trade

No. of Periods : 10

Expected Learning outcomes :

- Defines International Trade.
- Defines absolute advantage theory based for International Trade.
- Explains with statistical examples how each country receives Absolute Advantages.
- States the reasons for Absolute Advantage.
- Defines The Comparative Advantage Theory based for International Trade.
- States assumptions of Comparative Advantage Theory.
- Explains with statistical examples how the comparative advantages are gained.
- Explains internal exchange rate.
- Calculates external exchange rate to enter international trade in order to achieve mutually beneficial gains.
- States the sources (reasons) for the comparative advantage.
- Explains how the benefit of competitiveness affects International Trade.
- Explains the static and dynamic gains of International Trade.

Instructions for lesson planning :

- Inquire from students why Sri Lanka purchase motor cars from Japan and why Japan purchase textiles from Sri Lanka.
- Conduct discussion highlighting the following facts.
    - Japan is more efficient in the production of motor cars and less efficient in the production textiles than Sri Lanka .
    - Sri Lanka is more efficient in the production of textiles and less efficient in the production motor cars than Japan.
    - Therefore Sri Lanka produces more of textile and by selling those to japan purchase motor cars from Japan.
    - Japan produces more of motor cars and by selling those to japan purchase textile from Sri Lanka.
    - In this way international trade takes place between countries.

Guidelines to explain the subject matters :

- A certain country in the world exchanging goods and services with another country or with another group of countries is known as foreign trade or international trade.
- The international trade can be classified in to two parts as export trade and as import trade.
- Countries involve in international trade as they can gain benefits by that. The several such benefits are presented below.
  - International markets can be find out to sell excess products.
  - It can be purchased goods from foreign countries which can not be produced domestically,
  - Resources can be employed in productivity and efficiently.
  - Can be purchased high quality goods at a low price.
  - Advanced technology can be obtained from foreign countries.
  - Increasing the inflows of foreign investments foreign aids and foreign loans.
  - Increase of employment opportunities due to the progress of banking, insurance and transportation resulted with the progress of international trade.
  - Can be increased economic development.
  - Can be developed the international co-operation.
- Several trade theories evolved to explain basis of trade and the factors that determine the of basis, benefits of trade by the way of creating that benefits, the way of distribution of those benefits among countries, and the trade direction.
- There are two main theories for the basis of international trade.

  1. Absolute Advantage Theory
  2. Comparative Advantage Theory

- The economist Adms Smith presented the absolute advantage theory in 1776 to explain the basis and how the benefits of trade are created.
- The theory of absolute advantage explained that if a country can produce a good with less cost of production than its trading partner that country can obtain the absolute advantage and if that a country cannot produce a good with less cost of production then the trading partner then that country has absolute disadvantage.
- Absolute Advantage Theory shows when countries engage in international trade they will specialize in the production of the good in which it has absolute advantage and exchange

the surplus with the good in which it has the absolute disadvantage and by doing so will gain mutual benefits of international trade.

- Two approaches can be used to identify absolute advantage theory.

    1. Input approach
    2. Out-put approach

- Input approach means that , a country will export the product which can produce with less cost of production than its trading partner and import the product which incur more cost of production and gain benefits by that.

    - Eg : The amount of labour units needed for a unit of output

	Sri Lanka	India
Rice	5	8
Cloth	4	2

- According to the above example, Sri Lanka can produce 1Kg of rice with less labour units than India. Although, India wants 8 units of labour to produce 1 kg of rice, Sri Lanka wants only 5 units of labour. Hence, Sri Lanka has absolute advantage in the production of rice.

- In the above example the labour units needed to produce one meter of cloths for India is less than Sri Lanka. Although Sri Lanka wants 4 labour units to produce one meter of cloth India wants 2 labour units. Therefore India has the absolute advantage for the production of cloth.

- When the Sri Lanka and India engage in trade Sri Lanka will specialized in the production of rice and export the surplus to India. India will specialize in the production of cloth and export the surplus to Sri Lanka in this way countries will benefit from trade.

- Out put approach is refers to, both countries can be gained the benefit of trade , if a country can gain more output from one units of inputs relative to other country, by exporting and if the output is less from a inputs and importing the good.

Example : When we consider above example which related to units of inputs, the output from a unit of input that can be produced by Sri Lanka and India would be presented below

Outputs which can be produced form a units of labour.

Rice (kg)	$^1/_5$	$^1/_8$
Cloths (kg)	¼	½

- Sri Lanka can be produced more units of rice from one unit of labour unit than India. Although India is producing 1/8 kg of rice, Sri Lanka is producing 1/5 kg by a labour unit. Because of that Sri Lanka has the absolute advantage with rice.

- Output of clothes from a unit of labour that can be produced by India is more than Sri Lanka. accordingly India has the absolute advantage with clothes.

- The information related to the output approach also shows that both countries can obtain the benefit when the join to international trade by exporting rice from Sri Lanka to India and exporting cloths from India to Sri Lanka.

- There are several sources that affect to create absolute advantage.

  - Uniqueness of climates
  - Ownership of resources
  - Abundance of factors
  - Goodwill
  - Historical reasons of producing both goods

- When the absolute advantaged is owned by one country on or absolute advantage does not owned by any country , there would not be occurred basis for beneficial trade This is a main problem of the theory of absolute advantage.

  Example : Information about the production of computers and Radio which can be produced using one unit of labour by the countries of A and B Countries has been given by the schedule below.

	A country	B county
Radio	12	2
Computer	6	4

- According to above schedule absolute advantage of radio and computers is received by country A.

- Country B does not have absolute advantage in both Radio and computers. Therefore, following absolute advantage theory would not take place between the countries of A and B.

- To prevent from these failures of absolute advantage theory comparative advantage has been presented.

- The Theory of Comparative Advantage was presented by the economist Devid Ricado in1817.

- As shown by the theory of comparative advantage benefits of international trade can be obtained by engaging in international trade although the country does not obtain absolute advantage for any good.

- Comparative advantage theory state that, if a particular country can produce a particular good with a relatively less opportunity cost than the other country, the country has comparative advantage is producing one good and if a particular country has relatively high opportunity cost than the other country then that country has no comparative dis advantage in producing that good.

- Comparative advantage theory state that, when countries engage in the international trade, they can export the good in which that have advantage and import the good in which they have comparative disadvantage.

- According to opportunity cost data estimated related to the production of two goods both countries can benefit from trade by entering into international trade as Switzerland can specialize in the production of televisions in which they have lower opportunity cost and can export the surplus to Germany while Germany can specialize in the production of cloths in which they have lower opportunity cost and can export the surplus to Switzerland.

- Each country specializes by producing the good in which they have comparative advantage and will exchange the surplus product at a particular ratio.

- Exchange is done at a particular ratio only if it benefits both countries.

- Some assumption are used for comparative advantage theory.

  1. Perfect factor mobility

     It production resources that used for one industry used for another industry without any difference in efficiency it is ended percale factor mobility

  2. Constant returns to scale

     When input of a partners industry is changed output will also be changed proportionally.

     Example - When input devises output with also be doubled.

  3. Absences of experiments result to production or consumption

  4. Non consideration of transportations cost

- Two approaches are used to identify comparative advantages theory

  - Input approach

  - Out put approach

Example - output of Clocks and Televisions that can be produced by the countries of Switzerland and Germany by using one unit of labour is given by the schedule below.

Good	Switzerland	Germany
Clocks	4	20
Televisions	6	10

Following schedule intimation related to the opportunity cost of both products is given below.

Oppertunity cost of producing one unit of a clocks.

Switzerland $= \frac{6}{4} = 1.5$ (Unit of clocks)

Germany $= \frac{10}{20} = 0.5$ (Unit of clocks)

Opportunity cost of producing one unit of a Television.

Switzerland $= \frac{4}{6} = 0.67$ (Unit of clocks)

Germany $= \frac{20}{10} = 2$ (Unit of clocks)

According to above information the comparative advantages of producing clocks owned by Germany the reason is Germany has lower opportunity cost of producing clocks than Switzerland.

Opportunity cost of producing one unit of clock in Germany is units of television however, this value is 1.5 in Switzerland.

Switzerland has the comparative advantages of producing televisions.

opportunity cost of producing are unit of a television in Switzerland has a lower opponity cost of producing televisions.

- When estimating mutual beneficial exchange rate between countries, the relevant exchange rate takes two forms.

  1. Internal exchange rate
  2. External exchange rate

- The rate at which goods exchanged between countries before trade is the internal exchange rate.

- The internal exchange rate relevant to the example of Switzerland and Germany which used to show comparative advantage can be estimated as follows.

  Number of units that can be produced by one unit of labour.

	Switzerland	Germany
Clock	4	20
Television	6	10

Internal Exchange rate of Switzerland

Clock	4	:	Television 6
Clock	1	:	Television 15
Television	6	:	Clocks 4
Television	1	:	Clocks 0.6

Internal Exchange rate of Germany

Cloths	20	:	Television 10
Cloths	1	:	Television 0.5
Television	10	:	Clocks 20
Television	1	:	Clocks 2

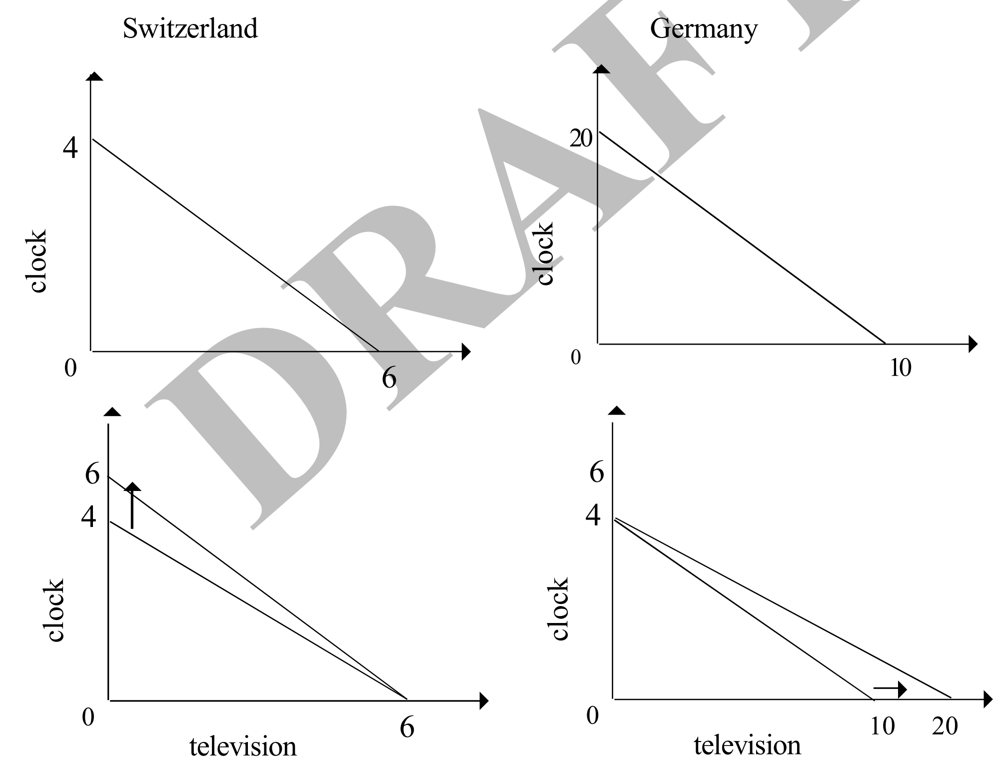
- Considering opportunity cost situations of two goods between countries it was mentioned earlier that Germany has comparative advantage with related to clocks and Switzerland has comparative advantage with related to televisions.

- Both countries should join trade by exchanging the good in which they have comparative advantage and by deciding external exchange rate which is more beneficial than the internal exchange rate calculated above.

- External exchange rate is the rate at which goods are exchanged between countries as a result of entering into trade.

- Mutually beneficial external exchange rate relevant to the above example is as follows.
  - For Germany per one clock more than 0.5 units of televisions and less than 1.5 units of televisions.
  - For Switzerland per one unit of televisions more than 0.67 units of clocks and less than 2 unit of clocks.
- Output approach shows new both countries can enter into trade based on the aides of output than can be produced by units of a particular input and by estimating the opportunity costs related to both products of in both countries.
  - There can be many external exchange rates relevant to above ranges. By exchanging goods under above such rate both countries can benefit from trade.
  - Which means can reach a higher consumption level.
  - Assume Switzerland and Germany enter into trade under the external exchange rate of 1 clock to 1 television following above range. Then both countries will reach a higher consumption level than before trade,

Example : Production possibility curves of Switzerland and Germany before trade are shown below.



As the goods are exchanged between countries following mutually beneficial external exchange rate of one clock to one televisions the way of reaching new consumption curves are shown by the graphs below.

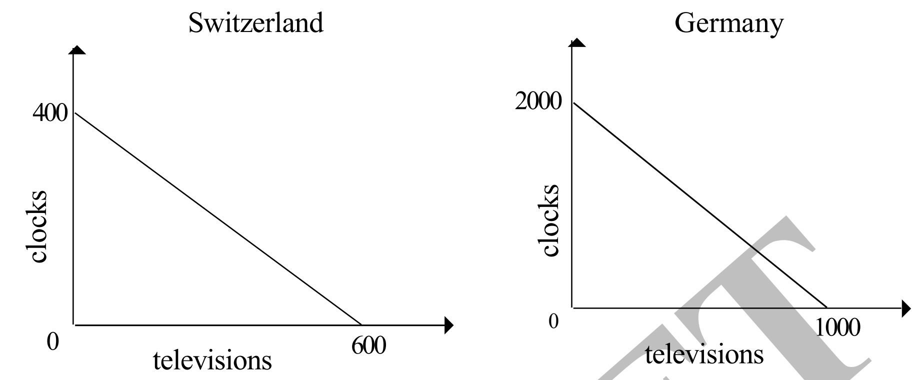
- As gains from exchange (achieving of higher consumption level) is achieved by entering into trade .. mutually beneficial exchange rate, gains from specialization also be achieved by entering into trade.

- Gains from specialization means possibility to increase world production without increasing the total resources.

Example :

Assume both countries of Switzerland and Germany own total resources of 10 labour units each. The output data of clocks and televisions that can be produced by using 100 units of labour is shown by the table below.

Output produced using 100 units of labour



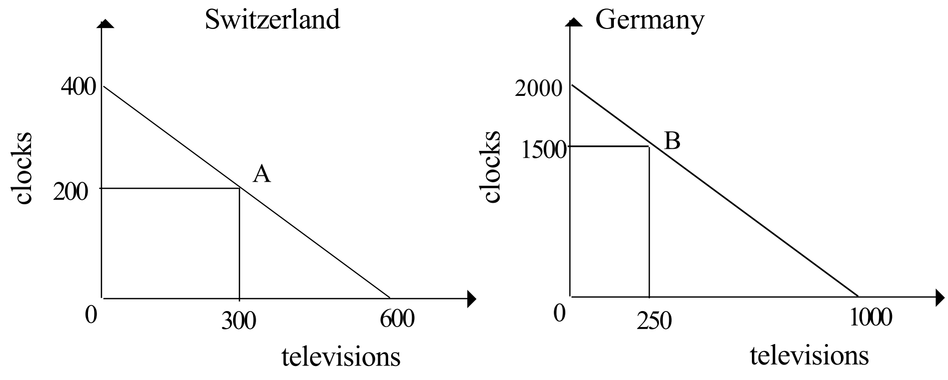
Before entering into trade, if Switzerland operates at the point A of the above PPC, Switzerland

clocks	200
television	300

and Germany operates at the point B of the PPC

Germany	clocks	1500
	Television	250

The situation can be shown by the PPC below.



As depicted by above production possibility curves world production of clocks and televisions before entering into trade is given by the table below.

	Switzerland	Germany	World production
Clocks	200	1500	1700
Television	300	250	550

After entering into trade as Switzerland specialized in the production of televisions and Germany specialized in the production of clocks Switzerland uses all labour recourses of 100 units to produce televisions and Germany uses all labour resources to produce clocks (perfect specialization) Therefore, world production after trade is as below.

	Switzerland	Germany	World production
Clocks	0	2 000	2 000
Television	600	0	600

Although world production of clocks before trade was 1700 units after trade its production world be 2000 units. Which means as entered into trade world production of clocks increased by 300 units.

- Similarly world production of televisions before trade was, After trade world production of televisions are 600 units means world production of televisions increased by 550 units of trade.
- Before and after trade both Switzerland and Germany had 10 units of labour.
- Therefore, above example explains the way of increasing world production without increasing labour resources. Which is the benefit of specialization.
- At a time when we know the number of inputs needed to produce a good then the comparative advantage can be estimate with opportunity cost.

Example :

Labour units needed to produce one unit of output

	Country A	Country B
Computer	4	6
Motor bikes	10	12

It find comparative advantage when inputs are given, the data should convert in a way it shows the number of output that can be generated from one of input.

Following that data given in the above table is converted as below.

Output that can be produced from one unit of labour

	Country A	Country B
Computer	1/4	1/6
Motor bikes	1/10	1/12

Opportunity cost situations of each good in both countries related to above data is shown below.

Opportunity cost of producing one unit of computer

Country A $= \dfrac{\frac{1}{10}}{\frac{1}{4}} = (0.4)$ (Motor bike unit)

Country B $= \dfrac{\frac{1}{12}}{\frac{1}{6}} = 0.5$ (Motor bike unit)

Opportunity cost of producing one unit of Motor bikes

Country A $= \dfrac{\frac{1}{4}}{\frac{1}{10}} = 2.5$ (Computer unit)

Country B $= \dfrac{\frac{1}{6}}{\frac{1}{12}} = (2)$ (Computer unit)

- According to above data, country A has comparative advantage in producing computers and country B has comparative advantages in producing motor bikes.

- Therefore, country A can produce computers with specializing in it and can export the surplus to country B while country B can produce motor bikes with specializing in t and can export the surplus to country A, In this way both countries can benefit from international trade,

- Some of the main sources of comparative advantages that affects international trade (Reasons for comparative advantage) is given below.

1. Change in resource stock :

Due to change in resource stock owned by a country, changes in opportunity cost of producing goods occur.

Example:

Abundance of mineral resources is different from a country to another country. Crude oil is abundant in Saudi Arabia. Due to this Saudi Arabia has less opportunity cost in the production of crude oil and therefor it specializes in that production and export it. Similarly opportunity cost of producing gold is less in South Africa and it specializes in the producing of gold and export it.

2. Quality

Difference among countries exist not only on the amount of resources but also on the quality of resources. For example although labour is abundant in a country if the labour force is untrained the productivity of labour remain at a lower level. On the other hand in a country where there is less labour force but trained then that labour force will be more productive when there is less productivity of labour as the opportunity cost is high comparative advantages decrease. However, when productivity of labour increase as opportunity cost of the goods produces is law it general's comparative advantages.

3. Differences in taste

Althing all the countries own equal resource stock and equal efficiently in opportunity cost arise due to the changes in taste exit amount countries differences amount relative prices of countries equal. As more increases are received to produce the goods with more taste, they are produced at a lower opportunity cost and by exporting them comparative advantages are obtained.

4. Economics of scale -

when exporting the production capacity if unit cost decreases it generates economics of scale when there are economics of scale as goods can be produced with relatively lower opportunity cost comparative advantages can be gained related to the product.

5. product differentiation -

Compare advantages can also be gained use to the differences exit amount goods within the same industry. Today most of developed countries benefit from international trade based on this product differentiation for instance when we consider motor cars industry, Germany export motor cars to Great Britain and an import motor cars from Greater Britain. The reason is the difference of opportunity cost among countries which arise with product differentiation although the industry is same.

6.Technological differences -

Comparative advantages among countries also differ due to technological changes A product countries can gain comparative advantages if it can use new technology related to the production of a particular goods and by producing the good at a relatively lower opportunity cost.

7. Government policy

Comparative advantages can also create with the government policy when government impartment policies of producing tax incentives to uplift a particular industry or providing subsidies for research and development and follows protectionist policies or provide concessionary loans and as a result if goods can be produced at a lower opportunity cost then comparative advantages are obtained through trade.

8 Inflation

When a particular country has long term inflation then the opportunity cost of producing a good increases. as a result comparative advantages decrease and exports are discourages.

9. Location

Location of a country will also determine comparative advantages, It industries are located in a way it can obtain all raw materials needed for the industry easily, comparative advantages can be obtained by producing the good at a relatively lOwer opportunity cost.

- Gains of competition means providing more value for the consumers when supplying a particular good than the other competitors.
- This value can be a lower price than the other competitors or providing a quality service at a higher price than the other competitors.

- It a firm can gain more profit continuously than the average profit earned by the other competitors within the industry, the firm can gain benefits of competition.
- Maintenance of benefits of competition sustainable is a strategy of the firm.
- Same sources affect benefit of competition are as follows.
  - Large potential in the fields of research and development. Due to this it can stand ahead due to the introduction of innovations.
  - Intellectual property rights.
  - Unique ownership in distribution networks.

    Example - Research related to crude oil, quarrying.
  - Ability to respond in generating a luxury product
  - production at a low cost]
  - Existence of large production capacity
  - Existence of strong marketing strategies.
  - Convenience in supplying circulating capital
  - Existence of superior management groups.
  - Existence of barriers to entry or from of a monopoly.
- Benefits of international trade can also be static gains or dynamic gains
- Benefits owned naturally by a century based on production or consumption of called static gains, There are same reasons for this

    1. Factor endorsement
    2. Differences in taste among countries.
    3. Largeness of economics of scale in production

- Benefits gained by the countries due to created situations of technological improvement product differentiation, government policy and trade agreements are called dynamic gains.

Competency 9.0 : Explores how international trade influences on Sri Lankan economy by analysing the theoretical basis of International trade.

Competency level 9.2 : Analyses protectionist policies and its impact on free trade

No. of periods : 06

Expected Learning outcomes :

- Defines protectionism.
- States the protectionist strategies separately.
- Explains the tariff protection.
- Explains the nominal rate of protection and effective rate of protection.
- States the Non-tariff protectionist strategies.
- Presents the arguments for and against the protectionism.

Guideline for explanations of subject matters :

- Any kind of activity which prevents or stops entering of foreign products in to the domestic market is known as protectionism.
- Protectionist activities which prevent to free trade can be divided in to two types.
  1. Tariff protectionism
  2. Non – tariff barriers
- Tariff protectionism refers to imposing tariff on import and export.
- Imports are discouraged because domestic consumers have to pay higher price when imposing tariff on imports are imposed.
- The main objective of imposing import tax is protecting domestic producers from foreign competition.
- When imposing import taxes over imported goods as consumers attract to domestic product the domestic production of the good expanded.
- Because of this it has an opportunity to increase the price of domestic products.
- As a result of increasing import tariff the protection received by the good by with the increased price of imported good is known as nominal rate of protection.
- By nominal rate of protection the price of domestic producer presented as a percentage of domestic price of the imported product.
- The rate of nominal protection does not depict the actual amount protection received by the domestic product.

- The nominal tariff rate imposed according to the value of final product imported. But domestic producers use imported inputs and so many intermediate goods for their production process.

- When tariff are imposed on input and intermediate products nominal rate of protection calculated according to nominal tariff rate does not depict the accrual protection received by the domestic producer..

- Because of that, to measure the actual amount of protection received by the domestic producer by the imposition of tariff adapt a effective rate of protection is used..

- The following formula can be used to calculate effective rate of protection.

$$ERP = \frac{(V_1 - V_0)}{V_0} \times 100$$

ERP = Effective Rate of Protection

Vi = Value added of the domestic producer after the tariff

Vo = Value added of the domestic producer before the tariff

Example : Assume that the price of pair of shoe is Rs. 5 000 and Rs 3 000 spent to import inputs needed to produce this pair shoes.

Then the domestic value added of the good is Rs. 2000 (5 000 – 3000). Assume that same pair of shoe selling at the same price at the world market. Accordingly if the domestic value added of the firm is more than to Rs. 2 000, then the price of domestic shoe will be more than Rs. 5 000, because of that domestic product can not completion with the imported good. So, we think, to protect the domestic producer if a tariff as of 10% is imposed on imported production. Then price of imported good changed as below.

The price of pair of shoes before tariff	= 5 000
The cost for the tariff	$= 5000 \times \frac{10}{100}$
After tariff the price of imported pair of shoes	= Rs. 5 500

Accordingly because of the tariff, the value added of the domestic firm increase to Rs. 2 500

After tariff price of the imported pair of shoes = Rs. 5 500

After tariff value added of the domestic product ion firm = 5 500 - 3 000

Accordingly effective rate of protection can be calculated as follow.

$$ERP = \frac{(V_1 - V_0)}{V_0} \times 100$$

$$= \frac{2500 - 2000}{2000} \times 100$$

$$= \underline{\underline{25\%}}$$

- According to the example, because of the nominal tariff, the domestic product get 25% of effective protection.
- But, above taxes is imposed over the value of final production.
- If they imposed a tariff on inputs, it would not included here. Then it would not depict the actual protection by the above effective rat of protection.
- The ERP is changing when it has imposed a tariff on imported inputs, It can be explained by the example below .

Example 2 :

- According to the above example, 10% tariff is imposed for importing pair of shoes. Assume that imposing a 5% tariff is imposed on import inputs. Then the domestic value added and value of the imported shoe would be changed.

Value of imported inputs before tariff = Rs. 3000

The value of inputs after tariff = Rs. $3000 \times \frac{5}{100}$

= Rs. 3000 + 150 = 3150

Domestic value added after tariff = 5 500 – 3150= 2350

$$ERP = \frac{V_1 - V_0}{V_0} \times 100$$

$$= \frac{2350 - 2000}{2000}$$

Effective rate of protection $= \underline{\underline{17.5\%}}$

- Apart from imposing taxes over the final product as tariffs are imposed on imported inputs the ERP is decreased by7.5.
- The effective rate of protection can have a higher value based on the following conditions while other determinants remain constant.
    1. Nominal tariff rate imposed on final production being a higher value.
    2. Tariff rate on imported inputs being higher value
    3. The percentage of import imposed inputs being higher value
- Approaches used for protection except import and export tariffs are called non tariff barriers they are as follows.
    1. Imposing rationing or deciding a quota
    2. Providing subsides or incentives for producers
    3. Dumping
    4. Limiting the exports voluntarily
    5. Controlling the foreign exchange
    6. Imposing rationing for limitation of export and imports
    7. Imposing trade embargoes
    8. Imposing standards of administration and technological standards
- Following arguments can be presented in favour of protectionism.
    - It is important that using protectionist policies when taking decisions related to production, national defense, political and economic decision making .
    - It is important to protect the domestic industries and to safeguard employees of them.
    - The protectionist policies help to protect infant domestic industries from experienced foreign competitors.
    - It is important to use the protectionist policies, to prevent the fluctuations of the countries when engage in international trade specializing on limited number of products and for economic diversification of the countries
- It is important to prevent dumping
    - It is useful to solve the Balance of payment problem
    - It is important to increase the utilization of domestic resources.
    - Important to prevent the importing of demerit goods.
- Following arguments can be presented against the to protectionism.
    - The domestic and foreign markets can be contracted because following the protectionist policies.
    - The national income can be decreased because of the contraction of international trade.

- Because of the absence of incentive to decrease the cost of production inefficient industries' can be created
- Production of quality goods can be decreased.
- They can be barriers against diffusion of technology

Competency 9.0 : **Explores how international trade influences on Sri Lankan economy by analysing the theoretical basis of International trade.**

Competency level 9.3 : Analyses reasons for change and consequences of foreign terms of trade while stating the types.

No. of Periods : 09

Expected Learning outcomes :

- Defines the Terms of Trade.
- Names out the types of Terms of Trade.
- Expresses the Commodity Terms of Trade with equation.
- Calculates Commodity Terms of Trade with given data.
- Explains reasons for changes in Commodity Terms of Trade.
- Explains economic consequences in changes of Commodity Terms of Trade.
- Expresses the Income Terms of Trade by equation.
- Calculates Income Terms of Trade with given data.
- Explains economic consequences of Income Terms of Trade.

Guideline for explanations of subject matters :

- Terms of trade refers to the amount of units that can be imported from a unit of good exported.
- There are two types of term of trade
  1. Commodity terms of trade
  2. Income terms of trade
- The amount of units that can be imported from a unit of good exported is known as commodity terms of trade.
- Commodity terms of trade can be calculated as follows.

$$\text{Commodity terms of trade} = \frac{\text{Export Price Index}}{\text{Import Price Index}} \times 100$$

Example :

Export price index in 2013 = 103.5

Import price index in 2013 = 80.4

$$\text{Commodity terms of trade} = \frac{103.5}{108.4} \times 100$$

$$= \underline{\underline{95.47\%}}$$

- The reasons for changes of commodity terms of trade can be presented as follows.

Reasons for decrease in commodity terms of trade	Reasons for increase in commodity terms of trade
• Increase in export price index while decrease in import price index · • Decrease in export price index more than decrease in import price index· • Increase in import price index while export price index remain constant · • Decrease in export price index while import price index remain constant	• Increase in export price index and decrease in import price index· • Decrease in import price index more than decrease in export price index· • Decrease in import price index while export price index remain constant· • Increase in import price index while export price index remain constant

- The change of commodity terms of Trade in fast few years has been given below.

Year	Export price terms of Trade index	Import price Index index	Commodity Terms of trade
2010	100	100	100.0
2011	106.3	102.5	100.2
2012	105.2	103.51	99.6
2013	105.5	108.51	97.6
2014	105.5	108.51	97.6
2015	95.6	95.3	100.3
2016	94.1	90.35	104.0
2017	95.1	91.35	102.0

- The effects of change in commodity terms f trade can be presented as followings.
- The effect of increase in commodity terms of trade.
    - Increase in import potential of exports
    - Balance of trade being favourable
    - Overall balance of BOP being un favourable
    - Increase in reserves and assets

- The effects of decrease in commodity terms of trade.
  - Decrease in import potential of exports
  - Increase in the deficit of balance of payments
  - Increase in the overall deficit of balance of payments
  - Decrease in the reserves and assets
- The index that used to measure the import potential of export income is known as income terms of trade .

Following equation is used to measure income terms od trade.

$$\text{Income terms of trade} = \frac{\text{Export Price Index}}{\text{Import Price Index}} \text{ x Export volume index}$$

Example : Export price index in 2013 = 103.5
Import price index in 2013 = 108.5
Export volume index in 2013 = 116.4

$$= \frac{103.5 \times 116.4}{108.4} \times 100$$

Income terms of trade in 2013 $= \underline{\underline{11{,}113.8}}$

- Income terms of trade can be calculated by multiplying the commodity terms of trade with export volume index.
- The effects of income terms of trade can be presented separately as follows.

Effects of increase in income terms of trade	Effects of decrease in income terms of trade
• Increase in export earnings· • Increase in export potential • Increase in balance of trade • Overall balance of balance of payments being favourable • Generating of inflationary effects	• Increase in import expenditure • Decrease in import potential • Decrease in balance of trade • Overall balance of balance of payment being unfavourable • Decrease in inflationary effects

Competency 9.0 : Explores how international trade influences on Sri Lankan economy by analysing the theoretical basis of International trade.

Competency level 9.4 : Investigates globalization, regionalization and bilateral trade agreements.

No. of Periods : 09

Expected Learning outcomes :

- Explains objectives of World Trade Organization.
- Describes functions of World trade organization.
- Defines Globalization.
- Presents the arguments for and against globalization.
- Defines Economic Integrations.
- Describes recent trade agreements with Sri Lanka.
- Provides examples for bilateral trade agreements.
- Provides examples for multilateral trade agreements.
- Explains importance of foreign trade agreements

Guideline for explanations of subject matters :

- World trade organization is an international organization which was established in 1995 to continue world trade smooth methodical and also to promote multilateral trade by strengthening general agreement on tariffs and trade.
- Objectives of world trade organization are as follows
  - Promotion of multilateral trade
  - Making reformation within the international trade mechanism through the amendments made to the laws of trade and by minimizing barriers of trade..
  - There are six main functions of world trade organization.

    1 . Administration of the implementation of international trade agreements signed by the member countries of the world trade organization.
    2. Provide a forum for negotiations related to promoting of free trade.
    3. Settlement of trade disputes.
    4. Review of national policies of member countries.
    5. Help developing countries to settle problems related to trade policy by implementation of technological aids and training programmes.
    6. Act in a cooperate manner with other international economic institutions.

- The trend of economic, cultural and political integration of countries of the world in different extents is known as globalization.
- Economics concern on economic globalization.
- The integration process of countries of the world through the various flow of trade, capital, financial and technology is called economic globalization.
- Today economic globalization improvements on technology and policies mutual dependence, growth of financial flows internationalization of production process and international labour movement will be acute due to globalization.
- Arguments for globalization can be presented as follows.
    - Due to decentralization of production process outward shift of production and consumption boundary.
    - Acquiring of new ideas and experiences.
    - Increase in volume of world trade .
    - Ability to use as a strategy of economic growth.
    - Increase in foreign investment.
    - Possibility to import raw materials at a low price.
    - Increase in foreign employment.
    - Improvement of education and knowledge.
    - Generation of new employment opportunities.
    - Foreign currency remittances become main exchange flow of some countries.
    - Integration of isolated countries of the world with international economic system.
    - Expansion of new technology.
    - Production of quality goods due to competition.
    - Ability to obtain information through internet.
- Arguments against globalization can be presented as follows.
    - Non distribution of the benefits of globalization to all citizens of the world fairly.
    - More benefits are gained by developed countries.
    - Broadening of international income disparities.
    - Easy Spread of global economic crisis to other countries of the world.
    - Growth of social riots.
    - Human lives being unsecured.
    - Arising of environmental problems.
    - Destroying of culture.
    - Arise of economic crisis due to financial market instabilities.
    - Loss of employment opportunities due to the collapse of domestic industries.

- Spread of terrorism.
- Arising of health problems.

- The process of exchanging factors of production and goods and services without tariffs and non tariff barriers or among various countries is called economic integration.
- Various forms of economic integration are as follows.

1.Preferential Trade Agreement (PTA)

2. Free Trade Area (FTA)

3. Custom Unions(CU)

4.Common Market(CM)

5.Economic and Monetary Unions(EU)

6.Fully Economic Integration(FEI)

- The organizations formed by the countries to exchange goods and services among member countries at less barriers than the trade barriers among non- member countries is known as preferential trade agreements.
- In this particular percentage of common tariff which agreed to pay by the member countries related to the trade that takes place within the region will be eliminated.

Examples :

European Economic Area Agreement (EEAA)

North American free trade Agreement (NAFTA)

- A free trade area is a grouping of countries within which trade barriers between the members are generally abolished but where barriers apply as they wish when trade takes place among non-member countries.
- Example for free trade area are given below.

African Free Trade Zone (AFTZ)

Asia Pacific Free Trade Zone (APFTZ)

Central European Free Trade Zone (CEFTA)

North American Free Trade Zone (NAFTZ)

- Custom union is an organization formed by a group of several countries to maintain trade among member countries without trade barriers and to maintain a common trade policy among member and non memeber countries.
- In this tariffs are totally abolished for member countries for agreed upon categories of goods and same rate of tariff is applied for agreed upon categories of goods which import from non member countries.

- Some examples for custom unions are as follows.

  Central American Common Market (CACM)

  Caribbean Community (CARICOM)

  North American Community (NAC)

  South African Customs Unions (SACU)

- Integration of counties to continue goods and services trade among member countries without trade barriers and which follows a common policy when continuing trade by the member countries with non member countries and which facilitate movement of factors of production is called a common market..

- Some example for common markets are as follows.

  The Caribbean community and Common Market

  Central American Common Market

  Central African Economic and Monetary Community

- A union formed by a group of countries to continue trade among member countries without any trade barriers and to continue goods and services trade among member counties and non members countries on a common policy with facilitating free movement of labour and capital non members countries with a similar monetary and fiscal policy is known as a Economic and Monetary Union.

- Example for Economic and Monetary unions are as follows .

  Central African Economic and Monetary Community (CAEMC)

  West African Economic and Monetary Community

  European Economic and Monetary Union

- To exchange goods and services and factors of production among member and non-member countries without any barriers and to maintain common monetary and fiscal policy with a common political policy among member nations the association formed is known as fully integration.

- Agreement signed for economic integration can be classified into two types

  1. Bilateral trade agreements

  2. Multilateral trade agreements

- Trade agreements made between two countries with related to trade and financial activities are known as bilateral trade agreements bilateral trade agreements that Sri Lanka has entered recently are as follows

  Indo-Sri Lanka Free Trade Agreement(ISFTA)

  Pakistan – Sri Lanka Free Trade Agreement(PSFTA)

- Trade agreements made among several counties with related to trade and financial activities are known as multilateral trade agreements.

  (Provide students recent data relating to trade agreements)

- Importance of foreign trade agreement are as follows.
  - Improvement of cooperation among countries
  - Expansion of the market.
  - Decrease in cost of transportation.
  - Decrease in the prices of domestically produced goods
  - Improvement of foreign investments
  - Possibility to purchase new industrialized goods at a low price.
  - Increase in employment.
  - Decrease in the prices of row materials.
  - Expansion of the opportunities related to export diversification.

Competency 9.0 : Explores how international trade influences on Sri Lankan economy by analysing the theoretical basis of International trade.

Competency level 9.5 : Investigates the nature of foreign trade and foreign trade polices in Sri Lanka.

No. of Periods : 09

Expected Learning outcomes :

- Explains export trade in Sri Lanka.
- Explains export structure in Sri Lanka.
- Explains import trade in Sri Lanka.
- Explains import structure in Sri Lanka with data from Central Bank Report.
- Explains the trends of import in Sri Lanka with data from Central Bank Report.
- Explains foreign trade polices in Sri Lanka with recent information.
- Explains the problems of export trade.
- Presents the problems and solutions for export trade.

Instructions for Lesson Planning:

- Inquires from students about the goods which earn more foreign exchange and the goods which spend more foreign exchange to purchase.
  - Order to students differentiate the goods according to the Central Bank
  - Inquires from students about goods which earn more foreign exchange and expend more foreign exchange.
  - Ask student to classify the goods according to the central bank report.
  - Make Aware the students that Sri Lanka export and import many kinds of goods.
  - Group the students appropriate and engage the students in the activity by providing the instructions.

Proposed Instructions for Learning:

- Pay attention to the topic which received your group gained among the following topics.
  - Export trade
  - Import trade
- Conduct a group discussion to identify the topic received by you .
- Line up the components related to the topic.
- Show relative proportionate contribution of the components during a period of time.
- Tabulate contribution of components and changes in the structure.
- Presents the reasons affect to those changes.
- Prepare to presents your group findings creatively by tables and graphs.

Guideline for explanations of subject matters :

- Export trade refers to marketing of goods and services by a particular country to other countries of the world.

  Example: Selling tea for America by Sri Lanka.
- The export structure of Sri Lanka can be presented as below.
  - Agricultural exports
  - Industrial exports
  - Mineral exports
  - Un classified exports

  (Explain export structure of Sri Lanka using central bank report)
- The export structure of Sri Lanka can be shown as follows.

	2015	**2016 (%)**
Agricultural export	23.5	22.6
Industrial export	76	77
Mineral export	0.3	0.3
Non-classified export	0.2	0.1

(Explain with the use of recent data of the central bank report)

- Example for agricultural export can be shown as follows.

  Tea, Rubber, Coconut and other agricultural exports

- Examples for industrial export can be shown as follows.
  - Food, Beverages and tobacco
  - Textiles and garments
  - Petroleum products
  - Rubber products
    - Ceramic products Leather,
    - travel goods and footwear
    - Machinery and mechanical appliances
    - Gems, diamonds and Jewellery
    - Other industrial exports
  - Examples for mineral exports are given below
    - Gem
    - Diamonds
- The changes of the composition of export structure after 1977 till today can be shown as follows

Export structure	**1977**	**2016 (%)**
Agricultural goods	79	22
Industrial goods	14	77
Other	07	01

(Expain with the use of recent data of the central bank report)

- The changes of industrial exports from 1977 to 2015 can be shown in detail as follows.

Industrial goods	**1977**	**2015**	**2016**
Textiles and garments	02	46	47
Petroleum products	09	04	05
Food Beverages and tobacco	-	03	03
Diamonds and jewellery	-	03	03
Rubber products	-	07	7
Other Industrial goods	03	06	08
Transport equipment	-	2.3	01
Leather, travel goods and footwear	-	1.3	2

- Import trade refers to the purchasing goods and services from other countries of the world.

  Example : Purchasing motor vehicles from Japan.
- The import structure can be shown as follows.

  Consumer goods

  Intermediate goods

  Investment goods

  Unclassified imports (According to central Bank Report 2016)

  Examples for import of consumer goods can be presented as follows

  Rice, Sugar, Wheat floor, Milk powder

  Private motor cars

  Electrical equipments

- Examples for imports of intermediate goods can be presented as follows

  Fuel

  Fertilizer

  Chemical products

  Textiles and garments

- Examples for import investment goods

  Machinery and equipment

  Transport equipment

  Building materials

The changes of the import structure from 1977 to 2015 can be shown as follows

Import structure	1977	2015	2016
Consumer goods	42%	25%	22%
Intermediate goods	48%	51%	51%
Investment goods	12%	24%	27%
Other goods	01	-	-

- Changes of investment goods from 1997 to 2016 in detail are given below.

Intermediate goods(%)	1977	2015	2016
Crude oil	23%	14.3%	12.8%
Textiles	03%	12%	14%
Diamond	-	0.9%	3%
Chemical products	01%	4.6%	4.4%
Wheat and corn	01%	1.9%	1.3%
Fertilizer	-	1.5%	0.7%
Other intermediate goods	-	15.7%	15.1%

- When considering Sri Lanka trade policy fallowing facts can be mentioned according to 2016 central bank report.
- A foreign trade policy which directed towards the improvement of the relationship between Sri Lanka and global economy was continually implemented 2015 and 2016.
- Government proposed broad structural changes to establish a foreign trade policy frame work.
- Tried to change laws and regulations which determine trade.
- Establishing of a strong approach towards foreign market by establishing of trade agreements.
  - Strategic promotion of trade.
  - Further rationalization of tariff policy
  - Privatizing of export promotion.
  - Entering into bilateral agreements which help export promotion.
  - Continuous participation for multilateral approaches.
  - Problem faced in export trade are as follows.
  - Price fluctuations in expert craps
  - Decrease in export volume
  - Huge instabilities in the world market.
  - Global economic recessed.

- Slow growth of main export markets of Sri Lanka.
- facts that can be presented as solutions for above problems are as follows.
- Pay attention to improve the relationship between Sri Lanka and the global economy.
- Increase economic promotion and marketing programmes at the foreign markets.
- Strengthening of trade agreements productively.
- Protection of new export markets and expansion of existing markets and diversification of goods.
- Establishing of institutions that promote industries which focus exports
- Establishing of a council for export development.

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.

Competency Level 10.1 : Analyses items of Balance of Payments.

No. of Periods : 05

Expected Learning outcomes :

- Defines balance of payments.
- Explains the components of Balance of Payments with examples.
- Prepares a Balance of Payment schedule using hypothetical data.
- Presents the recent format of Balance of Payments statement with Central Bank Report.

Guidelines for explanation of subject matters :

- Sri Lanka has taken steps to arrange the Balance of payments schedule according to a new structure from 2013.
- It is a schedule that states the form of balancing the changes between foreign currency which gain from foreign transactions and the foreign currency which pay for foreign countries when a country is is engage in economic transactions with the rest of the world during a period of year.
- In this all economic transactions which occur between residents and non-residents is recorded systematically according to the principle of double entry system.
- The all transactions of balance of payments sheet should be reported (recorded) in two places with the same value according to the basic standard.
- The value of all transactions must b e note down in two columns as credit and debit and the value of debit must be reported as (+) and the value of credit must be reported as().
- The net balance of all transactions would be zero when the value of all transactions are noted in a credit column and a debit column with a same value.

  This is the meaning of "Balance of payments always being the balanced.
- The two principles should be followed when recording the values of credit and debit separately.
- It should be reported the value of item as a debit value (+) when flow of an asset / a good / or a service flows from the country to another country.

  Example : When Sri Lanka export garments it should be included to current account as a debit value.
- It should be reported the value of item as a credit value (-) when receive a good / a service or an asset receive to the country from a another country.

Example : When Sri Lanka imports fuel from a middle east country that value should be included in current account as a credit value.

- Balance of payment transactions are 5 types according to the new structure.
    1. The transactions related to goods and services exports and imports.
    2. The transactions related to income receipts and payments
    3. The one way transactions related to the things such as assets, wealth and gifts.
    4. The transactions related to buying and selling of financial assets .
    5. The transactions related to buying and selling of non-produced and non financial assets
- According to the nature of transactions there are three main accounts in the new structure of balance of payments.
    - Current account
    - Capital account
    - Financial account
    - In current account there are three sub accounts.

  1 Goods and services account

  1.1 Goods Account (Trade)

  1.2 Services Account

  2. Primary Income Account

  3. Secondary Income Account
- Several examples related to international trade has been given below.

  1. Exporting 500 million worth of stock of garment by a Sri Lankan garment company.

  2. Importing of 1000 million worth of vehicles from a Japanese automobile company.
- The transactions related to above examples are included to the trade account. The account which is reported the exporting and importing of goods with rest of the world is known as Trade Account.
    - The non monetary gold of trade account is reported as a store of value of private sector.
- The balance of trade account is known as balance of trade. It is also known as the balance of visible goods account.

  Balance of trade = Goods exports – imports

  Example : Export s500, Imports = 1000 (million)

  Balance of trade = Exports of goods – Imports goods

  = 500 – 1000

  = - 500

- Balance of trade would be a deficit or a surplus.
- In the above example it is a deficit.
- The account which is reported expenditures and incomes of non factor services of a country with rest of the world in the international trade is known as services account.
- Following components are included for services account.
  - Travel
  - Sea Transport
  - Air transport
  - Financial Services
  - Telecommunications services
  - Insurance Services

Balance of services accounts = Export income of services – Import expenditure of services

- Balance of services account would be a deficit or a surplus.
- The balance of goods and services account can be calculated by adjusting the balance of goods account to balance of services account.

Balance of goods and services account = Balance of goods account + Balance of services account.

- Some examples related to foreign transactions of Sri Lanka are given below.
  - Sri Lanka pays Rs. 500 million of annual interest for the loans obtained from foreign countries.
  - Receiving of Rs. 300 million dividends by a Sri Lankan company from an investment from an investment of factory in Maldives.
- The transactions related to above example are included to the primary income account of balance of payments.

Balance of primary income account = Foreign factor income received – Foreign factor income paid

- Example 2:

Balance of primary income account = foreign factor income received – Foreign factor income paid

= 300 – 500

= - 200

- The items included to primary income account are interest, wages, dividends obtain by investing in financial assets which arise from the production process.
- Some transactions takes place between residents of Sri Lanka and non-residents are given below.

  - Sri Lanka who works at middle east sent Rs. 1500 million of workers' remittances to commercial banks.

  - Chinese who live in Sri Lanka sent Rs. 500 million of workers at middle east sent Rs. 1500 million of workers' remittances to a bank in china.

Secondary income account = Receipts of foreign transfers– payments of foreign transfers.

1000 = 1500 – 500

- It can be gain the balance of current account by matching the balances of good and services account, primary income account and secondary income.

	Credit	Debit	Balance
Balance of goods and services account	500	1000	-500
Balance of primary income account	300	500	-200
Balance of secondary income account	1500	1500	500
Balance of current account			-200

- Non – produced non-monetary assets are included in capital account and monetary assets are included in financial account.

- The non-produced and non monetary assets between residents and non-residents are included in capital account as credit and debit.

- Examples for non-produced monetary assets are given below:

  - Licence
  - Lease agreements
  - Brand names
  - Buying and selling of goodwill
  - Selling a Land to an embassy

- Donations from governments and institutions of foreign countries
- Patent
- Royalties

- The last sub account of the balance of payments schedule is the financial account.
- The financial account is reported the transactions related to monetary assets and liabilities that take place between residents and non-residents.
- The transactions of financial account can be divided mainly five types based on its function.
  - Direct investments
  - Portfolio investments
  - Financial derivatives
  - Other investments
  - Foreign Reserve Assets
- The sum of the balances of current and capital accounts of a country shows that whether the country is a net creditor (balance of payment surplus) or net debtor (balance of payment deficit) with the rest of the world.
- The total balance of current and capital accounts should be equal to the balance of financial account. following the principle of double within balance of payments due to any statistical error, including the item of errors and omissions the balance is achieved.
- Financial account represents the way of financing balance occur e net deficit or net surplus .
- The items included to each of the account of balance payments schedule can be represented by hypothetical data as follows.

	(Credit)	(Debit)
• Trade Account		
Exports	1000	
Imports		1300
Receipts of non-monetary gold	150	
Payments of non-monetary gold		200
• Services Account		
Receipts	800	
Payments		600
• Balance of goods and services account		150
• Primary income account		
Receipts	800	
Payments		1000
• Balance of primary income account		200
• Secondary income account		
Receipts of employee remittances	1800	
Payments for employee remittances		800
Receipts of government (0fficial) transfers	400	
• Balance of secondary income account	1300	
• Balance of current account	950	

	Credit	Debit
• Capital Account		
Receipts	600	
Payments		300
• Balance of capital account	300	
Balance of current and capital account	1250	
Financial account		
Direct investments (Assets)	150	
Direct investments (Liabilities)		100
Various investments (Assets)	200	
Various investments (liabilities)		150
Other investments (Assets)	150	
Other investments (Liabilities)		50
Reserve Assets (Net)	250	
Balance of financial accounts	450	

Competency 10..0 : Explores how foreign finance affects the Sri Lankan economy.

Competency level 10.2 : Proposes strategies and solutions for the imbalances of Balance of Payments in Sri Lanka while recognizing them.

No of periods : 06

Expected Leaning outcomes :

- Explains recent trends of balance of payments with the use of central bank's annual report.
- Explains the nature of current account deficit.
- Proposes short term solutions to correct balance of payments imbalances.
- Proposes long term solutions if there is a continuous deficit in balance of payments.

Guideline for explanations of subject matters :

- Recent trends of balance of payment from 2012 to 2016 is shown by the schedule below

Year	Balance of goods and services account	Balance of primary income account	Balance of secondary income account	Balance of current account	Balance of capital account	Balance of financial account	by Overall balance
2012	- 8155	-1219	5392	-3982	130	4263.4	151.2
2013	- 6429	-1817	5639	-2607	71	30637	958.4
2014	- 6407	-1808	6227	-1988	58.3	-1536.1	1369
2015	- 6105	-2097	6193	-2008.5	46.3	-2312.3	-149
2016	- 6211	- 2184	6453	- 1942	26	2199	- 500

Source : Central Bank Report

- There is a long term deficit n the balance of current account in Sri Lanka
- Also balance of goods account (trade account) shows a long term deficit.
- In addition service account shows a surplus.
- Balance of goods and services account fluctuated over the past few years.
- An analysis of data relating to the deficit of goods and services account is shown by the schedule below.

Year	Balance of goods account	Balance of services account	Balance of goods and services account
2012	-9417	1262	-8155
2013	- 7609	1180	- 6429
2014	- 8287	1880	- 6407
2015	- 8430	2325	- 6105
2016	-9090	2879	- 7211

Source : Central Bank Report

- Increase in the deficit of the balance of primary income account is shown by the schedule of and that deficit has affected over the deficit of current account.
- Net balance of secondary income account shows a surplus and also the value shows a gradual increase. Moreover it affected to decrease the deficit of current account.
- From 2010 financial account recorded a positive value and form 2014 it shows a deficit.
- Current account balance of balance of payments shows a long term deficit. The value was positive only in the year of 1977 and after opening the economy it shows a long term deficit.
- Balance of current account is obtained by adjusting the balances of trade account balance, services account, primary income account and the secondary income account. For the higher value of current account deficit, the negative value of trade account and primary income account has affected.
- Existence of a deficit or a surplus n overall balance is known as balance of payment imbalance. This value was a surplus in the years of 2010, 2012, 2013 and 2014 while the value was a deficit in the years of 2015 and 2016.
- The sum of the balance of current account and capital account of balance of payment of a particular economy shows whether the country is a net debtor or s net creditor with the rest of the world or not. If the sum value is positive or a surplus then the country is identified creditor with the rest of world and if the value is negative or a deficit then the country s identified as a debtor with the rest of the world.
- When overall balance of the balance of payments shows a deficit, it generates more powerful effects over the economy than a surplus. Therefore, more concern should be given to finance short term deficit of balance of payment.
  - How the short term deficit is financed is explained by the term short term financing.
  - Following are several methods followed for short term financing.
    - Using of foreign reserves
    - Borrowing money from IMF
    - Borrowing short term funds from other international financial institutions
- Solutions that can be presented for long term deficit are as follows.
  - Export diversification
  - Encouraging of foreign direct investment
  - Empowering traditional exports
  - Establishing export promotion zones (EPZs)
  - Entering into agreements with foreign countries
  - Let exchange rate to depreciate or devaluate
  - Improving of export competiveness by controlling domestic inflation
  - Discouraging of other imports except essential imports
  - Improving of import substitution industries(ISI)

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.
Competency level 10.3 : Analyses foreign resource gap and he change of import potential of foreign assets.
No of periods : 06

Expected Leaning outcomes :

- Defines Foreign Resource Gap.
- Calculates Foreign Resource Gap with hypothetical data.
- Explains how the Foreign Resource Gap is settled recently, with the use of Central Bank report.
- Defines Foreign Assets.
- Presents composition of Foreign assets.
- Explains the importance of maintaining foreign assets for a country.
- Explains the measuring of relative quantity of Foreign Assets and it's recent quantity by using the central bank annual report
- Expresses for how long import possibility of foreign assets are sufficient.

Guideline for explanations of subject matters :

- At a given period of tome the difference between all foreign receipts and all foreign payments of an economy is known as foreign resources gap.
- Foreign resource gap = foreign receipts – foreign payments
- Exports income, receipts of services, receipts of primary income and receipts of secondary income are considered as foreign receipts.
- Import expenditure, payments for services, payments of primary income, payments of secondary income, payments of debt, private capital transfer payments, investment outflow and payments of commercial banks are considered as foreign payments.

Example : Foreign receipts and foreign payments of a hypothetical economy are shown below.

Foreign receipts (Rs, in million)		Foreign payments (Rs, in million)	
Export income	800	Import expenditure	1100
Receipts of services	120	Payments of services	50
Receipts of primary income	130	Payments of primary income	150
Receipts of secondary income	140	Payments of secondary income	100
		Private capital transfer payments	70
		Payment of debt	260
		Investment outflow	40
		Payments of commercial banks	60
Total foreign receipts	**1190**	**Total foreign payments**	**1830**

Foreign resources gap = foreign receipts – foreign payments

$$= 1190 - 1830$$

$$= \underline{\underline{-\ 640}}$$

- Sri Lanka's foreign resources gap is a negative value(deficit) several reasons affect for that.
  - The value of imports being relatively greater than exports
  - Payments of primary income being relatively greater than the receipts of primary income
  - High debt payments
  - Increase of commercial banks' payments to foreign countries.
- The negative value of foreign resource gap is not favorable for a country. Also the deficit of a foreign resource gap generates following economic effects.
  - Decrease of the amount of foreign assets
  - Has to of borrow foreign loans
  - Decrease in external value of money
  - Decrease of money supply
  - Increase of foreign debt service payment
  - Need to face for international debt crisis
- The relative amount of foreign recourse gap is measured relative to the values of gross domestic product and total foreign earnings.
- Foreign resource gap was fulfilled during recent years with the use of followings.
  - Short term loans
  - Debt obtained from suppliers
  - Bank loans
  - Debt obtained from IMF
- Although considerable amount of foreign resource gap was fulfilled through non debt sources of foreign aids and foreign direct investments, during the time period when Sri Lanka considered to be a lower income earned country, at present foreign aids received by the country is limited due to the fact that it ranked as a lower middle income earned country. Therefore, foreign resource gap has to be fulfilled today through the resources of short term loans, commercial banks loans, and the loans obtained by IMF. However, unfavorable effects, such as increase in cost of interest rate and fast decrease in the amount of foreign assets due to the loan should be settled within short period of time occurred when fulfilling resource gap through above sources.

- Foreign assets are the foreign money and securities deposited at the central bank of other countries on be half of a particulars country.
- Foreign assets are there with Sri Lanka's Central Bank with depository institutions and with the Sri Lankan government.
- From them foreign assets of central bank and government are called Gross official Assets.
- Composition of foreign assets are a follows.
  - Monetary gold of Central Bank
  - Foreign bank deposits held by the central bank
  - Foreign currency held by the central bank
  - Foreign securities purchased by the central bank
  - Foreign currency held by commercial banks
  - Foreign securities purchased by commercial banks

  Special growing rights owned by Sri Lankan government

- When discussing the composition of foreign assets it is important to know the construction of the ownership of it. Ownership of foreign assets of Sri Lanka during 2015 is given below. Percentage

Institution	Owned by total foreign assets
Central bank of Sri Lanka	73
Depository institutions	22
Sri Lanka government	5
	100

- Maintenance of foreign assets is important for a country in several ways.
  - To maintain external value of currency stable
  - To determine money supply
  - To find import potential
  - To settle balance of payments deficit
  - To determine how monetary authority can be influenced to the foreign exchange market
  - To win trust of foreign investors.
- The relative amount of foreign assets owned by a country is measured for how long import potential of foreign assets is sufficient.

- Import potential of foreign assets is estimated as follows.

$$\text{Import potential of foreign assets (months)} = \frac{\text{Amount of foreign assets}}{\text{Monthly import expenditure}}$$

For example :

Foreign assets owned by a country = Rs. 60 000 million

Annual import expenditure = Rs. 12 000 billion

Import potential of foreign assets(Months) = 60 000/ 12 000 = 5 monts

Which means country's foreign assets are enough to import goods and services for 5 months.

Import potential of foreign assets of Sri Lanka over the past few years are as follows.

Year	import potential of foreign assets (months)
2011	4.3
2012	4.7
2013	4.8
2014	5.1
2015	4.9

Import potential of foreign assets shows a slight decrease.

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.

Competency Level 10.4 : Investigates how foreign investments affects the economy of a country.

No of periods : 04

Expected Leaning outcomes :

- Defines Foreign Investments.
- Classifies foreign investments.
- Describes foreign direct investments and states is recent trends.
- Analyses favourable effects and unfavourable effects of foreign direct investments.
- Identifies Portfolio investments and analyses its recent trends.

Guideline to explain subject matters :

- A country, institution or a person purchases financial assets of another country or purchasing more shares of an existing firm to establish new firms is known as foreign investments.
- Foreign investments can be described under two main headings.
  - Foreign direct investments
  - Portfolio investments
- Acquiring of productive real assets of a foreign country with an expectation of a particular benefit is known as foreign direct investments. Example : Acquiring of assets such as factories, lands by foreign investors.
- When estimating the value of foreign direct investments of a particular year both inflows and outlaws of capital are being considered.

- Recent trends related to foreign direct investments are given below.
  - Foreign direct investments over the past few years remained at a lower level than expected.
  - Investments remained at a lower level due to loss of faith of investors regarding political instability.
  - As interest rate shows an increment during recent years it severely affected over Sri Lanka and other emerging economies.
  - Foreign direct investments are mainly directed towards projects such as land development, tourism and telecommunication.
  - Those investments mainly came from Hong Kong, Mursi Island, The Netherlands, China and from India'

- The value of total foreign direct investments after deducting borrowings of registered companies of BOI was US $ 81 million. This value in 2014 was recorded as US $ 894 million. Therefore, it shows a sharp decline.
- Investors are reluctant to invest on emergency economies .
- Delaying of port city project also affected unfavorably over foreign direct investments.
- Favourable and unfavourable effects of foreign direct investments are as follows.
- Improving efficiency of resource allocation due to strengthening of international factor mobility.
- Ability to fulfill resources gap (saving - investments) due to inflow of an extra capital flow.
- Ability to fulfill foreign exchange gap (Import export gap0
- Provides an answer for balance of payments deficit
- Non increase of debt burden
- Ability to gain new technology and management
- Outflow of huge amount of money as dividends and interest
- Unfavorably affects over domestic economic activities
- Loss of employment opportunities due to the use of capital intensive production techniques.
- Over consumption of natural resources.
- Collapse of domestic industries.
- Non receiving of tax revenue to the government as expected.
- Outflow of money which existed for domestic investors towards foreign businesses
- Outflow of talented workers

  (should provide knowledge to students related to information and trends of foreign direct investments with the use of central bank annual report)

  • Purchasing of money market instruments such as shares, securities and commercial papers of another country by foreign investors with an expectation of receiving a financial benefit is known as portfolio investments With portfolio investments the ownership, control or the management of a business will not be received by the foreign investors.
- Resent trends f portfolio investments can be presented as follows.
  - Recently investments towards shares showed a decline
  - The reason for this decline is the political instability prevails within the country.
  - The continuous instability situation at the share market discouraged investors in investing.
  - Revising of government investment policies to match broaden fields of foreign investments.

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.

Competency level 10.5 : Analysis the determination of foreign exchange rate

No of periods : 04

Expected Leaning outcomes :

- Defines foreign exchange market
- Defines foreign exchange rate
- Explains determination o foreign exchange rate systems

Guideline to explain subject matters :

- Relations of institutional structures where foreign exchange is exchanged is defined as foreign exchange market. In other words intuitional structures where the amount of foreign exchange is determined by demand for foreign currency and supply of foreign currency is defined as foreign exchange market.
- Foreign exchange market has organized to facilitate international trade and financial transactions by providing foreign exchange. Foreign exchange markets are considered as largest markets today.
- Foreign exchange market has organized as a network consists of all traders spread among all over the world rather than a share market which is organized at a definite lace and open within a definite boundary with a centralized payment system. Traders who engage in foreign exchange trade would effectively complete their transactions by deciding most beneficial price after inquiring information related to purchasing and selling price of foreign currency from other traders. Most of transactions at these trade networks are done over the phone and later those are confirmed by e-mail or by fax.
- There are various participants of a foreign exchange market.
  - Commercial banks
  - Foreign exchange brokers
  - Business firms
  - Central bank
  - General public
  - Government
- Commercial banks perform a major role within foreign exchange market. In this publishing of purchasing price and selling price of foreign exchange is important. The gap between selling price and purchasing price shows the profit margin of a commercial bank. Hard

currencies such as Us dollar Staring Pounds, Euro and Japanese yen are commonly exchanged at the foreign exchange market.

- If there is any change of prices occur at the centers of main foreign exchange market profiteers of foreign exchange takes advantage and earn profit s of it. Which means they purchase foreign exchange form the market where the price is low and sell them at the foreign exchange market where the price is high.

- The rate at which a unit of domestic currencies converted into unit of foreign currency or the rate at which unit of foreign currency is converted into a unit of domestic currency is known as foreign exchange rate. In this way expressing the price of one currency in terms of another currency is known as nominal exchange rate.
- There are two ways of expressing foreign exchange rate.
  - Direct quotation
  - Indirect quotation
- Expressing the value of foreign currency in terms of domestic currency is the direct quotation system or the price quotation system. For example showing of how many rupees are needed to purchase one US dollar.

  US \$ 1 = SLKR 152

- Expressing the value of domestic currency in terms of foreign currency is the indirect quotation system or the volume quotation system. The reciprocal of the direct quotation, of foreign exchange is the indirect quotation of foreign exchange rate.

$$1SLKR = \frac{1}{152}\ US\$ = 0.0065152$$

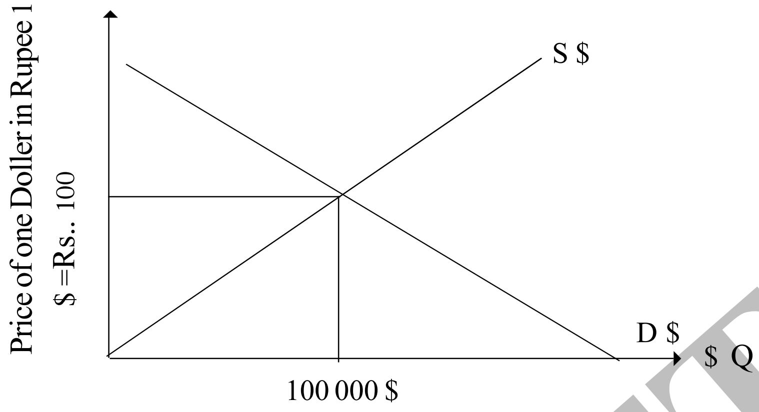
- The demand for foreign currency and supply of foreign currency determine exchange rate following direct quotation system.

For example the rupee value of a us dollar is determined by the demand and supply of us dollar at the foreign exchange market.

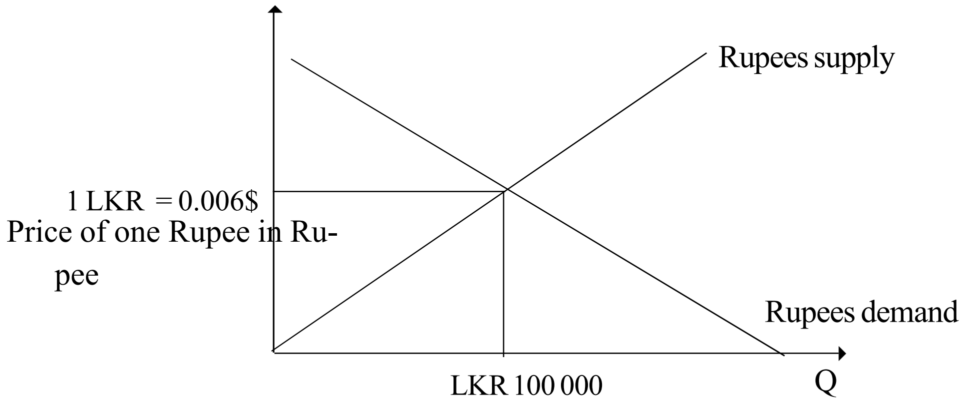
- Us dollars are demanded to settle payment transactions of balance of payments such as to import goods travel to other countries, to repay debt, to pay interest for borrowings and to pay transfers to foreign countries. There is an inverse relationship exists between rupee value of us dollar and the quality of dollars demanded.
- Dollar demand curve will shift to the right on the situations of where imports increase at the prevailing exchange rate foreign tours increase interest payment for debt increase and transfer payments to foreign countries increase. Dollar demand curve shift to the left at the situations where imports decrease, foreign tours decrease and transfer payments decrease.
- Supply of dollars determined by the receipts transactions of the balance payments. such as exports of goods, receipt of primary income and receipts of secondary income. A positive relationship exists between rupee value of dollar and supply of dollar.

mnpay

- When exports receipts of tourism and loans increase at the prevailing exchange rate system supply of dollars increase doller supply curve shifts to the right . When exports,, receipts of services decrese, supply of dolloars also decrese dollar supply curve shifts to the left.
- When demand for dollers and supply of dollors balanced it determines ruppes value of the dollar.



- At indirect quotation system exchange rate is detrmined based on the demand and supply for the domestic currency within the country for instance the amount of US dollars that can be purchaed from one rupee is determined on the demand and supply of sri Lankan rupees.
- At internal foreign excnahge market rupees are demanded by foreigners ruppes are demanded for transactions such as to purchase goods and services from Sri Lanka to travel within the country and to pay loans that has borrowed. a positive relationship exists between dollar price of a rupee and demand for Sri Lankan rupees.
- At previling exchange rate, when exports from Sri Lanka increse and receipts of services increase rupee demand curve shifts to the right when exports decrease and receipts of services decrease and when receipts of primary income decrase demand for rupees demand curve shifts to the left
- At Srl Lanka's internal foreign exchange market rupees are suppled by natives rupees are supplied to import goods and services from other countries goods and services are imported from other countries by purchasing dollars after supplying rupees . Therefore , there is a direct relationship exist between price of dollar in rupees and rupee supply.
- At floating exchange rate when imports increase and payments for services increase rupee supply curve shifts to thre right. When imports decrease and payments for services decrease rupee suplly curve shift to the left
- At foreign exchange market demand for rupees and supply rupees determine the price of one rupee in dollars.


Rupees supply
1 LKR = 0.006$
Price of one Rupee in Rupee
Rupees demand
LKR 100 000
Q

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.

Competency level 10.6 : Comparatively describes of Foreign Exchange Rate Systems.

No of periods : 08

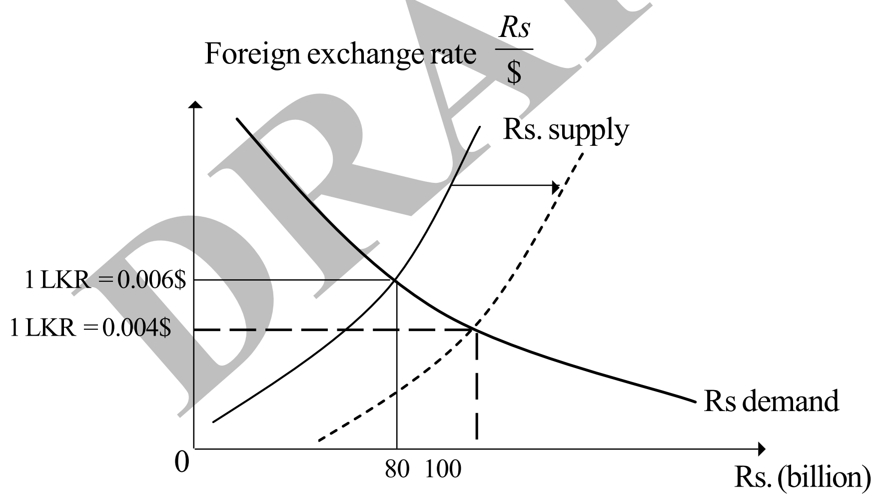
Expected Learning outcomes :

- Introduces Fixed Exchange Rate System and states its advantages and disadvantages.
- Introduces Floating Exchange Rate System and states its advantages and disadvantages.
- Introduces Managed Floating Exchange Rate System.

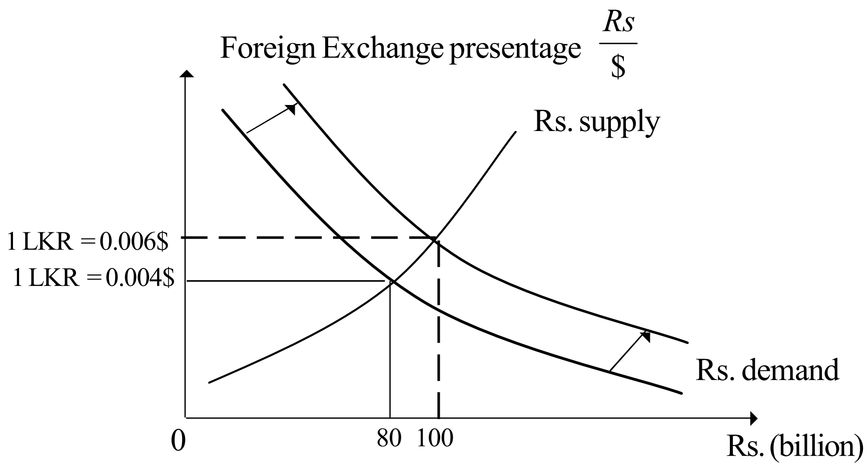
Guideline to explain subject matter :

- Mainly it is discussed on two exchange rate systems.
  - Fixed exchange rate system
  - Floating exchange rate system
- If exchange rate determined by the monetary authority prevails at the same level till it exchange by the same monetary authority it is known as fixed exchange rate system.
- Fixed exchange rate system was implemented at many countries of the world during the period of 1890 to 1920.
- Gold standard was the basis for fixed exchange range system. Which means issuing of currency based on a gold reserve system. When USA deposited one ounce of gold at Federal Reserve Bank it issued 35 US dollars. When one ounce of gold deposited at Central Bank of England it issued 12.50 Sterling pounds. Following this the exchange rate between US $ and £ was 1 £ = US $ 2.80. This value remained constant until the amount of dollars or sterling pounds issued against one ounce of gold changed.
- Fixed exchange rate system favourably affects over a country as follows.
- Fixed exchange rate system unfavourably affects over a country as follows.
  - To maintain external stability, internal stability should have to be sacrificed. If there is any deficit arise in balance of payments to eliminate that deflation should have to be generated within the internal economy.
- It there is any over valuation or devaluation situations exist with fixed exchange rate system it will always affects for a balance of payments deficit or a surplus.
- When maintaining fixed exchange rate system to fulfill foreign exchange deficit which arise under an over valuation situation, monetary authority should have to be maintained huge amount of foreign reserves and this would be a neutralization of huge amount of money.

- When foreign exchange reserves end to fulfill exchange deficit protectionist policies such as import control should have to be followed as an alternative approach and this will minimizes the welfare that can be gained through free trade.
- The exchange rate which determines on foreign exchange demand and supply is known as floating exchange rate or as flexible exchange rate.
- After 1970 flexible exchange rate system was implemented in many countries of the world. In addition when demand for foreign exchange increases it will increase foreign exchange rate and when demand for foreign exchange decreases it will increase foreign exchange rate.
- Decrease in external value of domestic currency as a result of increase in exchange rate is known as depreciation.
- Fluctuations of floating exchange rate is determined by inflows and outflows of foreign exchange. which means receipts and payments of balance of payments affect changes of the exchange rate.
- When exports of balance of payments grow fast floating exchange rate would move downwards. This leads to increase external value of money.



- When imports of balance f payments grow fast floating exchange rate would move upwards. This will leads to decrease external value of money.



- Floating exchange rate system would generate a mechanism which will automatically balance of payments. When there is a deficit in balance of payments exchange rate will start to increase as demand for foreign exchange increase and supply of foreign exchange decrease. Due to that external value of money decrease and as a result exports are encouraged and imports are discouraged. It will crates balance of payments equilibrium. On the other hand when there is a surplus in balance of payments supply of foreign exchange increases and demand decreases. Due to that exchange rate will start to decrease and as a result external value of money will start to increase. In this situation imports increase and exports and exports decrease and due to that balance of payments will reach its equilibrium.
- Advantages of a floating exchange rate system are given below.
    - As floating exchange rate system is a system which equate demand for foreign exchange and supply of foreign exchange there is no room for exchange rate over valuation or devaluation.
    - Global economic resources would distribute among alternative uses more efficiently as the exchange rate being more realistic.
    - As floating exchange rate system creates external stability without any influence policy makes can concentrate on internal stability
- When determination exchange rate as demand and supply at the foreign exchange market being equal there should not be any deficit or surplus situation arise. Because of this there is no necessity to maintain foreign services.
- Also as protectionist policies should not be followed to control imports and exports more opportunities will have to maximum social welfare through free trade.
- Disadvantages of a floating exchange rate system are given below.
    - Floating exchange rate system will be barrier to promote international trade as it is always subjected to fluctuations.

- Floating exchange rate system would generates uncertainties over foreign investors and lenders.
- As speculation to foreign exchange market activities are common with floating exchange rate system it will create more fluctuations within exchange rate.

- As exports can give more benefits from fluctuations of exchange rate, exports will less concentrate on improving export competitiveness.
- Managed floating exchange rate system is a combination of both fixed exchange rate and floating exchange rate. It is constructed to given benefits of both fixed exchange rate and floating exchange rate.
- Maintaining of a fixed exchange rate would provide a room to more exchange rate between a particular range. If exchange rate change beyond this range monetary authority intervention to the foreign exchange market and if it control fluctuations by buying and selling domestic currency at the foreign exchange market then the system is known as managed floating exchange rate system.
- In this way, although monetary authority intervenes to the foreign market in short term it is expected to reach a long term stability.
- Exchange rate prevails for the currency of a particular country change in various ways and in various quantities relative to various foreign currencies, to calculate mean value of those changes effective exchange rate is calculated.
- There are two forms of effective exchange rates.
    - Normal effective exchange rate
    - Real effective exchange rate
- Nominal effective exchange rate is the unadjusted average rate which determines on the basis of Sri Lanka's 24 major trading partners and which estimated on the weight given to each country based on the size of foreign trade takes place between countries.
- Real effective exchange rate is the exchange rate made adjusting average change of Sri Lanka's inflation rate and other trading partners inflation rate to the nominal effective exchange rate.
    - The relationship between nominal effective exchange rate and real effective
    - Exchange rate can be analysed using a simple example as follows.

Trading Partners	Nominal exchange rate (R)	Weight given on international trade (w)	$R \times W$	Sri Lanka's inflation rate	Foreign countries inflation rate	Change
1. USA	1 $ = Rs. 150	30	4500	8	10	-2
2. UK	1 $ = Rs. 200	20	4000	8	12	-4
3. India	1 Rs = Rs.225	50	112.50	8	-5	+3
4. China	1 U = Rs.2	10	20	8	10	-2
5. Japan	1 F = Rs.2	5	10	8	5	+3
		$\Sigma W = 100$	8580 ΣRW			-8+6=-2

$$\text{Nominal Effective Exchange Rate} = \frac{E_{RW}}{E_W}$$

$$= \frac{8580}{100}$$

$$= \underline{\underline{85.80}}$$

- Nominal effective exchange rate 85.80 means in any country mentioned above which engage in foreign trade with Sri Lanka average exchange rate is equal to 85.80.

- After adjusting average change of between countries inflation to nominal effective exchange rate the value of real effective exchange rate is obtained.

Real effective exchange rate = Nominal effective + Average change of inflation

exchange rate between countries

= 85.80 + (-2)

= 84.42

- If inflation rate of trading partner is higher that the inflation rate of Sri Lanka real effective exchange rate will have a lower value than nominal effective exchange rate.
- If inflation rate of trading partner is lower than the inflation rate of Sri Lanka real effective exchange rate value will be higher than the value of nominal effective exchange rate.
- Nominal exchange rate of countries always fluctuate. As a solution to this problem as mean value of nominal exchange rate real exchange rate is estimated.

- Real exchange rate can be used as an index to measure export competitiveness of the relevant country.
- If the value of real effective exchange tare is lower than the nominal effective exchange rate it states that the country's inflation rate is as lower than the inflation rate of the trading partners. If emphasizes high level of the export competitiveness of the country.
- If the value of real effective exchange rate is higher than the nominal effective exchange rate it states that the country's inflation rate is as higher than the inflation rate of the trading partner. If emphasizes lower level of the export competitiveness of the country.
- Real exchange rate is the exchange rate adjusted for the changes of price between two countries. It is estimated as follows.

  REE = NER × PD/PF

  RER - Real exchange rate

  NER - Nominal exchange rate

  Pd - Domestic Price level

  PF - Foreign price level

Example

1US $	= SLRs. 150	
Price level of Sri Lanka	= 110	
Price level of USA	= 220	
Real exchange rate	= (1/150) × (110/220)	= 0.0033

- There are two ways that real exchange rate can change.
  1. Decrease in real exchange rate
  2. Increase in real exchange rate

- When the value of real exchange rate at the end of year is lower than value at the beginning of the year it is called decrease in real exchange rate.

Example

Real exchange rate at the beginning of the year SLRS 1 = $0.03

Real exchange rate at the end of the year SLRS 1 = $0.01

- Following are the situations where real exchange rate decrease.

Decrease in the nominal exchange rate while domestic and foreign price level remain constant.

- Decrease in the nominal exchange rate and decrease in both domestic and foreign price level.
- Increase in foreign price level while nominal exchange rate and domestic price level remain constant.

- Following effect generate with decrease in real exchange rate.
  - Encouraging of export due to increase in export competitiveness
  - Discouraging of imports
  - Favorable effect over trade account
- If the value of same basket of goods traded in two countries is level of each country and then the ratio between two values is taken it is called Purchasing Power Parity Exchange Rate.

  Example:

  Price of same basket of goods = Rs. 1000

  Price of same basket of goods in foreign country = US \$ 20

Purchasing Power Parity Exchange Rate = US \$ 20 = Rs. 1000

= US \$ 1 = Rs. 1000 / 20

= Rs. 50.

·This is mean Purchasing Power of dollar at United States of America equals to Rs.50 with of purchasing power of Sri Lanka.

·Although there is a difference exist between nominal exchange rate is and Purchasing Power Parity Exchange Rate in long run equilibrium exchange rate with direct towards Purchasing Power Parity Exchange Rate.

·If nominal exchange rate and Purchasing Power Parity Exchange Rate is equal between two countries that means price of goods of the both countries equal to each other. Because of this one country can not be obtained gains of competitions moving beyond another country.

·Nominal effective exchange rate 85.80 means in any country mentioned above which engage in foreign trade with Sri Lanka average exchange rate is equal to 85.80.

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.

Competency Level 10.7 Analyses the changes of Foreign Exchange Rate and its consequences.

No of Periods :

Expected Leaning outcomes :

- Illustrates the ways of change of Exchange Rate.
- Defines devaluation and depreciation of Exchange Rate .
- Analyses the consequences of devaluation, using examples.
- Defines Revaluation and appreciation of exchange rate.
- Analyses the consequences of revaluation of exchange rate, using examples.
- Explains the conditions that should be fulfilled to achieve the expected targets of devaluation.

Guidance to explain subject matters :

- Exchange rate can be changed on demand for foreign currency and supply of foreign currency. This happens under a floating exchange rate system.

  Example :

  Commercial banks daily display the values of various exchange rates. Based on changes of such a display purchasing and selling of foreign exchange of an economy takes place.
- Devaluation and revaluation of exchange rate happens within fixed exchange rate system.
- Depreciation and appreciation of exchange rate happens within floating exchange rate system.
- Several factors reasons affect for change in foreign exchange rate
  - International trade
  - Capital mobility
  - Price fluctuations
  - Speculation
  - Economic strength
  - Government policies
  - Share market activities
  - Political Situation
- Exchange rate changes on demand and supply of exports and imports.

Example 01 :

- When a stock of textiles exported to United Kingdom by a Sri Lankan exporter, the United Kingdom importer should pay for it in Sterling Pounds.

- According to this example as supply of foreign exchange increases external value of rupee will also increases.

Example 02 :

- When Sri Lankan importer import motor cars from Japan, it should pay the Japanese company in Yen.
- According to this example as demand for foreign currency increases the external value of rupee depreciates.
- When foreign investments increase supply of foreign currency of a country increases as it leads to capita mobility. When supply of foreign currency increases it strengthen the external value of rupee.

- Relative to the fluctuations in average prices of goods and services of an economy when prices of goods and services of these countries Which engage in foreign trade transactions change it affects a change in exchange rate.

  Example : relative to increase in average price of goods and services in Sri Lanka, if average prices of India remains low, external value of Sri Lankan rupee depreciates relative to the value of Indian rupee.

  - Exchange rate changes on accumulating and selling of foreign exchange. Speculators engage in accumulating and selling of foreign exchange. They accumulate foreign exchange with an expectation of earning profits in future. It affects change in exchange rate.
  - Increase and decrease of foreign exchange inflows also depends upon lightening exchange rate policy of the government.
  - An active share market also affects over increase or decrease inforeign exchange..
  - Political stability or instability also affects over change in foreign exchange rate.

    Example : Political instability over 30 years affected exchange rate depreciation in Sri Lanka.

  - Due to change of official exchange rate by a monetary authority under a fixed exchange rate system devaluation and revaluation takes place. Lowing of exchange rate than official exchange rate at a situation of continuous deficit in balance of payments is known as devaluation.

- Depreciation of foreign exchange rate system happens under a floating exchange rate system. Decreasing the value of domestic currency in terms of a foreign currency is called depreciation.

Example : If the value of one US dollar increase from Rs. 100 to Rs. 114 following direct quotation system it is known as depreciation of foreign exchange rate.

- Although devaluation and depreciation happens under two exchange rate systems the impact of both is similar.
- The economic effects of devaluation of exchange rate are as follows.
  - Increase in the domestic price of imports
  - Increase in import expenditure than before
  - Domestic inflation can be increased if domestic demand depends upon imports.
  - increase in foreign debt service payment.
  - Balance of service account of balance of payments will be favorable due to increase in the earnings from tourism.
  - Secondary income account being favoruable due to increase in worker remittance including middle east employees remittances.
  - Import demand directed towards domestic goods due to discouraging of imports with an increase in price of imports.
  - Export earnings can be increased due to increase in demand for exports.

Example : Assume value of one us dollar as Rs. 100 and the value of one unit if Sri Lankan textile export as Rs 100. If one us dollar value increased to Rs. 150 due to exchange rate depreciation then price of one unit of textileexport will be 0.66 dollars. Due to this demand for exports increases.

- Increase in the price of domestic currency in terms of foreign currency is known as revaluation of foreign exchange rate.

Example : if value of one us dollar is Rs. 114 following direct quotation system and if this value decrease to Rs. 100 it shown an increase in the value of exchange rate. At this situation due to increase in the value of rupee in terms of dollar more dollars should be paid to purchase rupees.

- Under a floating exchange rate system the value of exchange rate can be appreciated. However, the effects of both revaluation and appreciation are similar.
- The economic effects of exchange rate appreciation are as follows.
  - Decrease in the domestic prices of imports.
  - Decrease in inflation rate.(If defend upon imports)

  - The value of foreign debt interms of domestic currency decreases.
  - Decrease in the cost of repaying foreign debt.
    - Increase in import expenditure due to increase in demand for imports with an apparent decrease in domestic price of imports.
    - badly affects over balance of payments.
    - Discouraging of exports due to decrease in foreign exchange earnings of exports in terms of domestic currency.
- Unfavorable for foreign employees as domestic value of foreign earnings decreases.
- There are some objectives of foreign exchange devaluation.
  - minimizing of long term deficit in balance of payments.
  - Discouraging of import demand
  - Encouraging of export supply
  - Encouraging of worker remittances
  - Improving of foreign direct investments
- Some conditions should be fulfiller in order to achieve above objectives
  - I. Foreign demand price for exports should be elastic
  - II. Domestic demand price for imports should be elastic
  - III. Sum value of price elasticity of demand for exports and imports being greater than one (Marshall-Lerner condition)
  - IV. Domestic supply related to exports being elastic
  - V. Domestic price level remains constant
- It is essential to remain domestic price level constant to reach expected results of exchange rate depreciation and devaluation. When exchange rate is devaluated purchasing of Sri Lankan exports would be beneficial to foreigners. However, it there are fluctuations of domestic prices of goods and services the benefit of exchange rate devaluation would not be achieved.

Competency 10.0 : Explores how foreign finance affects the Sri Lankan economy.

Competency Level 10.8 : Inquires the functions of Multilateral Financial Institutions.

No. of Periods : 06

Expected Leaning outcomes :

- Names Multilateral Financial Institutions.
- Illustrates objectives of International Monetary Fund.
- Explains functions of International Monetary Fund.
- Illustrates objectives of World Bank.
- Explains the functions of World Bank.
- Examines recent changes of the World Bank

Guideline to explain subject matters :

- Financial institutions formed by gathering of all the countries of the world with an objective of improving world trade by strengthening international monetary corporation and to develop systematic foreign exchange rate system is known as multi-lateral financial institutions.
- There are two types of such multilateral financial institutions.
    - Internal Monetary Fund (IMF)
    - World Bank
- IMF was established in 27th December, 1945 with an intention of improving international monetary cooperation and to improve effectiveness of foreign exchange rate system by establishing stable foreign exchange rate. Also it was established to improve economic growth and employment level and also to provide temporary financial aids to facilitate balance of payments adjustments.
- There were 29 member countries initially and today there are 186 member counties.
- There are six objectives of IMF
    1. To promote international monetary corporation through a permanent institution which provides the machinery for consolation and collaboration of international monetary problems.
    2. To facilitate the expansion and balanced growth of international trade and to contribute thereby to the promotion and maintenance of high levels of employment and real income and to the development of the productive resources of all members as primary objective of economic policy.
    3. To promote exchange stability, to maintain orderly exchange arrangements among members and to avoid competitive exchange depreciation.

4. To assist in the establishment of a multilateral system of payments in respect of current transactions between members and in the elimination of foreign exchange restrictions which hamper the growth of world trade.
5. To give confidence to members by making the general resources of the fund temporary available to them under adequate safeguards thus providing them with the opportunity to correct maladjustments in their balances of payments., without resorting to measures destructive of national or international prosperity.
6. In accordance with the above, to shorten the duration and lessen the degree of disequilibrium in the international balance of payments of members.

Functions of international monetary fund are as follows.

1. Providing advices when national economies and world economies face various economic and monetary matters and thereby to help stabilize their economies.
2 Provide advices to keep maintain laws and regulations needed to establish quality of banking and monetary activities.
3 Providing temporary credit facilities to member countries to overcome sudden financial crisis situations; providing financial facilities to overcome long term economic problems and make necessary steps to provide solutions for economic problems through economic reforms.
4 providing technical assistance to member countries and train government and central bank officials.
5 Making of standards related to fiscal, foreign financial and national accounts between countries and distributes mutual understanding and education among member countries by publishing information accordingly.
6 World Bank was established in 1st of March 1947 with 42 member countries including United States of America and United Kingdom, following the Bretton Wood Summit held at Bretton Wood USA in July 1944, with an objective of reconstructing European countries destroyed by second world war.
7 World Bank which stated its functioning in 1946 was consist of 38 member countries initially. At present, there are 186 developing and developed countries are members of it.

- World bank consists of two main institutions

 1 International Bank for Reconstitutions and Development (IBRD)

 2 International Development Association (IDA)

- Objectives of World Bank are as follows.

  - Speed up economic development of member counties by providing investment facilities for production activities.

  - Establishing opportunities and provide facilities to encourage foreign private investments where member countries unable to gain foreign capital under lighten conditions.

  - Providing of long term loans for the productive production activities of member countries with the use of its own funds and the funds gained through other sources except private investments.

  - Establish balanced growth of international trade through the improvement of production resources of member countries and by encouraging international investments.

  - Reducing of world poverty.

- Functions of World Bank are as follows.

  - Providing of financial and technical aids to member countries

  - Providing of loans to member countries under concessionary conditions.

  - Providing of assistance to member countries to absorb foreign investments

  - Providing of expertise knowledge to plan and regulate necessary projects to speed up development of member countries

- Act to improve living standards of people, to establish sustainable development, to improve economic productivity to protect environment and to strengthen cooperation between public and private sector.

- Provide necessary assistance to its member countries to reach the path of globalization.

- Provide aids to its member counties to overcome unfavourable situations faced at the world market.

- Provide assistance to build favorable relations among world population

- provide assistance to its member countries to implement new economic policies.

Competency 11.0 : **Exhibits the interest of contribution towards sustainable development by analyzing the diversity of development.**

Competency level 11.1 : **Analyses factors of economic growth by realizing the importance of economic growth.**

No. of Periods : **06**

Expected Learning outcomes :

- Defines economic growth.
- Explains the way of measuring economic growth.
- Shows the determinants of economic growth.
- Explains the importance of economic growth.
- Explains cost of economic growth with examples.
- Explains recent trends of economic growth in Sri Lanka.
- Explains the common characteristics of the countries which attained economic growth process.

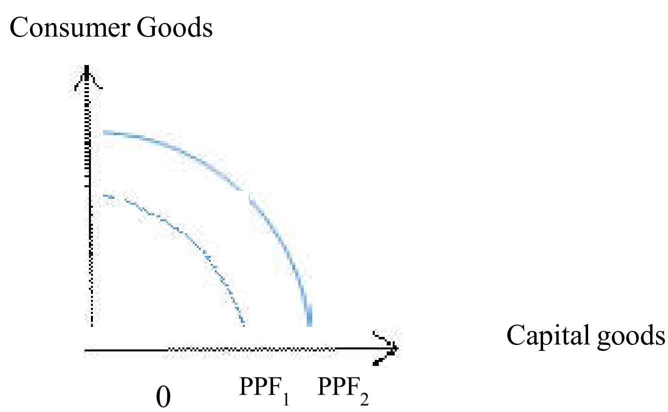
Guidelines to explain the subject matter :

- Continuous increase in real gross domestic product of the economy is called economic growth.
- When defined through a theoretical approach economic growth refers to the expansion of production capacity of the economy or potential output.

During economic growth real output of economy expands in long run.

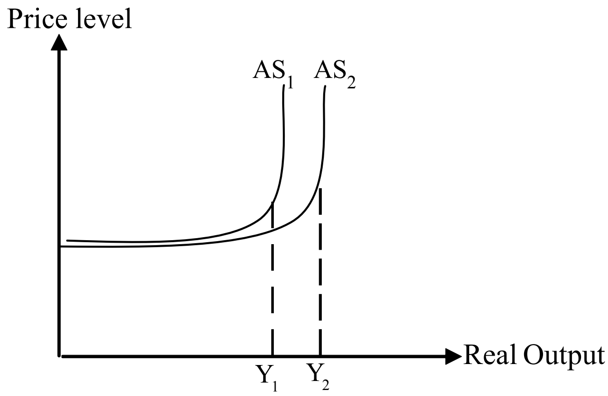
- However, the true meaning economic growth, is the expansion of capacity of the economy to produce goods and services.
- There are two days of showing economic growth.

1. Showing with the use of a Production Possibility Curve



Shift of a production possibility curve from PPC1 to PPC2 in the above diagram shows economic growth.

2. with the use of aggregate demand and Aggregate supply model



- According to above graph increase of potential output level of an economy can be shown by a rightward shift of an economic long run aggregate supply curve from As1 to As2 increase of potential output level of an economy shows economic growth.

Two methods are used to measure economic growth.

1. Increase in Real Gross Domestic Product or Real Net Domestic Product with time.
2. Increase in per capita Real Gross Domestic Product or per capita Real Net Domestic Product with time.

Economic growth is measured by Domestic Growth Rate.

$$\text{Economic growth rate} = \frac{\textbf{Current year's real gross domestic product} - \textbf{Previous year's real gross domestic product}}{\textbf{Previous year's real gross domestic product}} \; \mathbf{X\,100}$$

Example : Assume, current year's real gross domestic product as Rs. 210 million and previous year's real gross domestic product as Rs. 200 million.

Then, economic growth rate = 210 – 200 x 100

= 200

= 5%

Factors affecting economic growth can be stated as follows.

- Resource endowment
- physical capital
- Human capital
- Natural capital
- Social capital

- Productivity
    - Technology
    - Innovations
    - Investments for research and development
- Economic stability
- Political stability
- Good governance
- Incentives

- Importances of economic growth are as follows.
    - possibility to attain improved living standards
    - Increase in employment
- Maintenance of successful fiscal management
- Strengthening of investments
- Increase in profits of businesses with the improvement of trustworthiness.

- Costs of economic growth can be stated as follows.
    - Evolving of environmental problems
        - Environmental degradation
        - Environmental pollution
        - Destroying of non renewable resources
        - Generating of negative externalities in production and consumption
    - Generating of an inflationary situation at the economy
    - Evolving of income disparities
    - Evolving of regional disparities
    - Affect over living standards, if income is not invested in the fields where public welfare is improved.
    - Decrease in present consumption

(Explain recent trends of growth in Sri Lanka referring to the central bank report.)

- Common characteristics of the countries which succeeded in growth process are as follows.
    - Perfect benefiting from global economy
    - Maintaining of macroeconomic stability
    - Maintaining of high level of savings and investment
    - Allocation of resources based on market forces
    - Existence of dedicated, trustful and efficient governments

Competency 11.0 : **Exhibits the interest of contribution to sustainable development by analyzing the diversity of development.**

Competency level 11.2 : **Analyses various concepts related to development.**

No. of Periods : **06**

Expected Learning outcomes

- Defines economic development.
- Explains the changes in the economic structure with economic development process.
- Defines concepts of development.
- Analyses aspects of development.
- Distinguishes between economic growth and development.
- Defines human development.
- Defines sustainable development.
- Analyses aspects of sustainable development.
- Explains new trends related to development.

Guidelines to explain subject matters :

- Economic development is a transformation process which includes changes of economic structure which are connected to economic growth.
- Economic development include qualitative features apart from the quantitative facet while economic growth only represent quantitative facet.
- During economic development process, it should be occurred following qualitative changes in economic structure along with economic growth.
    - Rapid increase in industrialization
    - Increase in productivity of production resources
    - Advance the production techniques and technology
    - Modernization
    - Occur structural changes within the production sectors.
    - Decrease in unemployment poverty and inequality of income
- Development is a multidimensional process. It refers to the improvement of economic, social,, political and cultural facets of human life both qualitatively and quantitatively.
- Changes of living standards of man from an unfavouable situation to favourable situation is known as development.
- There are five determinants that affect unfavorable human states.

1. Limitedness physical things
2. Weaknesses of the body(being illed)
3. unfavouable social relations
4. Insecurity
5. Powerlessness

- Human development connected with various facets of political, cultural, economic and social. The sectional which belongs to that facets has presented below.
  - Income
  - Education
  - Health condition
  - Empowering
  - Political self-interest
  - Good social relationship
  - Equity
  - Working environment
  - Leisure benefits
  - Economic freedom
  - Qualitative o the environment

- Distinguishes between economic growth and development can be shows as follows.
  - Economic growth demonstrates an increase in production capacity of the economy and economic development demonstrates a growth of favourable living standards of the people of an economy.
  - Economic growth shows quantitative increase in volume of goods and services or income while economic development shows the qualitative growth of human life along with economic growth.
  - Economic growth demonstrates only quantitative facet of a country. Development demonstrates both quantitative and qualitative facets.
  - The economic growth of a country can be measured with per capita income or with Real Gross National Income.
  - Human development refers to broadening of own human capabilities perfectly as well as providing potential to use those capabilities in the fields of economic, social cultural and political to the maximum and giving those rights for future generations.

- Human development include various facets and these facets include,
    - Income
    - Education
    - Health
    - Political independency
    - Favourable social relations
    - Equality
    - Working environment
    - Economic freedom
    - Quality of environment
  - Sustainable development s the development that fulfill the human needs of present generation without compromising the human needs of future generation .
  - For Sustainable development a balanced growth of all three sectors of social, economic and environment should be achieved.
- The facets of sustainable development are given below.
  - Economic facets
  - Efficiency
  - Economic stability
  - Social facet
  - Equity
  - Participation
  - Empowering
  - Social mobility
  - Co-existence
  - Cultural uniqueness
- Environmental facets
  - Favourable sanitary environment for people
  - Efficient utilization of renewable resources
  - Protection of non-renewable resources

  (Explain the new trends related to development with new date)

Competency 11.0 : **Exhibits the interest of contribution to sustainable development by analyzing the diversity of development.**

Competency leve l 11.3 : **Investigates the composite indices by listing out the indices used to measure the development.**

No. of Periods : 06

Expected Learning Outcomes :

- List out the economic indices to measure development.
- present the importances and weaknesses of economic indices to measure development.
- Presents the World Bank classification of countries based on Per Capita Income.
- Names the composite Indices to measure development.
- Introduces the Human Development Index
- Names the components used to construct Human Development Index.
- Exhibits the classification of countries following to Human Development Index.
- Shows strengths and weaknesses of Human Development Index.
- Presents progress achieved by Sri Lanka in Human Development.
- Introduces the prosperity index.
- Describe its components.

Guideline to explain subject matters :

- Indices used to measure development are classified into two types
  1. Partial indices
  2. Composite indices
- Partial indices used to measure development are as follows.
- Growth of gross domestic and gross national income.
  - Sectorial growth of gross domestic product (Agriculture, Industry services)
  - Composition of gross domestic product.
  - Savings (Domestic /National)
  - Investment (Domestic /National)
  - Inflation
- From these partial measures

  The income obtained per one person, when the value of domestic or national income is estimated relative to the amount of population, it is known as per capita income. It can be estimated in real or nominal terms.

- Per capita income is estimated as follows.

$$\text{Per capita income} = \frac{\text{Gross domestic / National product}}{\text{Mid year population}}$$

- Indices which measure level of development of various sectors of the economy are known as partial measures.
- Importance of partial indices which measure development can be stated as follows.
- When using per capita income to measure development, the more appropriate measure would be the per capita real gross domestic product. The actual amount of the change of goods and services can be identified by that.
- Also it enables to identify the amount received by the public for their present and future consumption from the total product produced in a given year.
- As a whole the benefits gained by the population of a country is measured by this index. Which means through this index it can be estimated how much of real goods and services can be obtained by the population of a country for consumption and investment.
- Also it is important as an index of comparing the progress among countries.
- Following weaknesses can be identified with refers to the partial indices which measure development.
    - Above mentioned all partial indices are estimated based on national accounting data. However, when considering weaknesses of national accounting data and the problems arise in constructing those, it is a problem that whether the economic facet of development is accurately measured by these indices or not.
    - Defects arises when using national income data are as follows.
        1. Problem of double counting error
        2. Not showing of quality differences
        3. Absence of recording the values of productive economic activities which do not encounter in market transactions.
        4. Inclusion of data relating to demerit goods which are unfavourable for social welfare.
        5. Non-consideration of deprecation of natural resources and unfavourable effects over environment occurs with production.
        6. Non-reflection of distribution of income
        7. Absence of showing foreign indebtedness and depreciation of foreign reserves through national accounts.
        8. National accounts include only the goods and services relevant to physical welfare.
        9. Non-reflection of structural changes of the economy.

10. When comparing development level between countries, expressing of per capita income with the use of nominal exchange rate and it is expressed with United Sates Dollars.

- Based in per capita income World Bank classifies countries of the world as follows.
    1. Low income earned countries ($975 or less)
    2. Lower middle income earned countries ($ 977 – 3855)
    3. Upper middle income earned countries ($ 3856 - 11905)
    4. High income earned countries ($ 11906 or grater)
- Composite indices that used to measure development are as follows.
    1. Hunan development index
    2. Happiness index
- To observe social and economic development of various countries of the world, as a perfect and a more analytical measure. Human Development Index was introduced in 1990 by the United Nations Development Programme (UNDP).
- This index covers a broad dimension of social, economic progress of a country while continuing with an update of each year.
- Although large number of measures can be used to measure human development this index was constructed using three key components of development, namely health, knowledge and living standards.
- Three main components included to human development index are as follows.
    1. Life expectancy at birth (Health)
    2. (i) Mean value of years of schooling (knowledge)

       (ii) Expected years of schooling (knowledge)

       (iii) Purchasing power parity per capita gross national income

$$\text{Purchasing power parity per capita gross national income} = \frac{\text{Goods produced by a country X Dollar value of}}{\text{each goods size of population}}$$

- Based on the value of human development index, countries of world are classified under four levels of human development.
    1. Countries with very high level of human development.
    2. Countries with high level of human development.
    3. Countries with moderate level of human development.
    4. Countries with lower level of human development.

(Provide students the classification of countries following human development index of the relevant year)

- This classification is not done not based on the absolute values of the human development index instead it considers relative situation of those countries.
- As a measure of development human development index has following strengths.
- It is important as an indicator with more information where global comparisons are made.
- It is more beneficial as an indicator which is constructed to broaden knowledge and understandings of the things such as what included in development and which countries were succeeded in development.
- Development refers to the process which broaden the freedom available for a man to make choices, it is not only determined on income level but also on the factors such as life expectancy, literacy, education and health. Human development index considered all these things.
- Limitations occur when measuring development using a narrow measure such as per capita income is eliminated with human development index.
- Based in this index countries in the world can be classified according to is development levels.
- As a measure of development following weaknesses of human development index can be seen.
- Being an aggregate measure, using human development index inequalities in development that exist within the country (such as income distribution, regional development) cannot be identified.
- All areas of human development are not considered under this. Examples : Participation, political freedom, human security.
- Qualitative changes are not considered.
  E**xample :** Quality of school education
  Quality health facilities
- Although when measuring education the number of students enrolled to primary education only at the beginning is considered, it does not consider drop outs.
- Environmental dimension which affects development is not included within this index.
- For all main dimensions relevant to the index given an equal weight.
  (Explain to the students the progress achieved by Sri Lanka relating to human development using past few years human development index data).
- By year 2015 Sri Lanka achieved a value of 0.0750 in human development index and it remained at the positions of 73 from all countries of the world. Among South Asia, it remain at first.
- Happiness index was introduced in year 2008 to measure development of all sectors of countries of the world such as social, economic, cultural, political and environment.
- Components included in happiness index are as follows.
  - Good governance
  - Environment
  - Culture
  - Mental happiness
  - Time Management
  - Education
  - Health
  - Living standards
  - Social relations

Competency 11.0 : **Exhibits the interest of contribution to sustainable development by analyzing the diversity of development.**

Competency level 11.4 : **Examines standard methods that used to measure income inequalities.**

No. of Periods : 08

Expected Leaning outcomes :

- Define distribution of income inequality.
- Explains absolute and relative distribution of income with definitions.
- Explains various measures that used to measure income inequality.
- Constructs Lawrence Curve.
- Computes Gini Coefficient.
- Describes Quintile Dispersion Ratio.

Guideline to explain subject matters :

- Inequality of income distribution refers to the inequal distribution of a country.
- We can see the income distribution of a certain country in two approaches.
  1. Functional income distribution.
  2. Personal income distribution.
- Functional income distribution analysis income distribution in a country according to the income generating sources.
- It inquires the relative largeness of total, income groups of rent, wages, interest and profit which generated with various production resources of land, labour, capital and entrepreneur.
- Personal income distribution means that without ways of earnings line up the persons according to the total quantity of income which earn in a specific time.
- Here the persons are admitted to various income groups according to the total income they earn and accordingly it is calculated the number of persons belongs to each group and percentage of income allocated to the each group from the total income.
- As it is difficult to collect the information of income/relating to all persons they select a sample representing all and collect the income distribution information by a survey which is conducted by the Central Bank and census and statistics department.
- There are two approaches which can be analyzed personal income distribution.
  1. Absolute income distribution
  2. Relative income distribution

- Absolute income distribution refers to the comparison of the absolute income levels of different persons lived in an economy.
- It can be calculated number of persons in each income group and percentage of the number of persons in each income group line after the persons according to various income groups.
- The absolute income distribution data is beneficial to identify the poor people in an economy.
- When the personal income which lined up according to the income level is shown as a percentage of total income. It is called relative income distribution.
- Relative income distribution is calculated by preparing total income of each household or person according to ascending or descending order and listing them as income groups.
- Then the comparison is made by calculating the income which acquired by low income group as a percentage of total income and the income which acquired by high income groups as a percentage of total income.
- Relative income distribution data would beneficial to prepare economic and social policies.
- The way of presents the absolute and comparative income distribution has been given below.

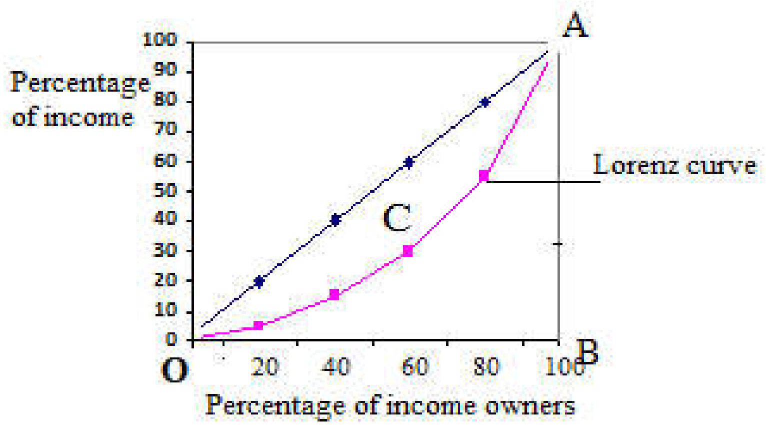
Absolute Income distribution		Relative income distribution	
Monthly Income (Rs.)	percentage of households	households as demand	percentage of income
1000	10	First (Lowest) 10%	12.5
1001 - 2000	30	Second10%	5.0
2001 - 3000	32	TThird 10%	24.5
3001 - 4000	20	Fourth 10%	28.0
20,000ට	08	Tenth 10%	40.0
	100		100.0

- The followings are used to measure income distribution.
  1. Lorenz curve
  2. Gini coefficient
  3. Quintile dispersion ratio

- The Lorenz curve has been introduced by an American economist called Max Lorenz in 1905.
- Lorenz Curve can be created by using following data.

Persons	Income (Rs.)	As a percentage of total sum				Accumulated value as a percentage	
		Person	Income	Person	Income	Person	Income
1	5	0.2	0.05	0'2	0.05	20	5
1	10	0.2	0.10	0'4	0'15	40	15
1	15	0.2	0.15	0'6	0.30	60	30
1	25	0.2	0.25	0'8	0.55	80	55
1	45	0.2	0.45	1'0	1.00	100	100

- We can create the Lorenz Curve by using values in last two columns.



- When Lorenz cure being away form the line of equality inequality of income distribution is more and when it is closed to the line of equality inequality of income distribution is less. If there is no inequality of income distribution the Lorenz Curve fall on the line of equality.
- If the inequality in icome distribution is shown as a number it is called Gini coefficient.
- The Gini coefficient was introduced by an Italian statistician Korado Gini and the way of calculating the Gini coefficient can be examined using the Lorenz Curve.
- The line of equality is shown by O-A line and Lorenz Curve shows the actual income distribution curve.
- Gini coefficient is calculated as a ratio between the area of line of equality and the area of Lorenz curve and the area of OAB triangle.

- The way of calculating the Gini coefficient is presented below.

$$\text{Gini-co-efficent} = \frac{\text{Area of OAB triangle}}{}$$

- According to this formula, Gini coefficient would zero when Lorenz curve lies on line of equality.
- If the Lorenz curve lies on OAB triangle, the income inequality would be maximized (Gini co-efficient equals to one)
- Accordingly, when the value of Gini coefficient is zero inequality (disparity) would be decreased and when the value of Gini coefficient equals to one income disparity is maximized.
- Quintile dispersion ratio is estimated by census and statistics department of Sri Lanka.
- In this income earners are classified into 5 income groups based on the level of income they earn. The income groups are as follows.
  - Low income earned group (first quintile)
  - Lower middle income earned group (second quintile)
  - Middle income earned group (Third quintile)
  - Upper middle income earned group (Forth quintile)
  - Upper income earned group (Fifth quintile)
- From total average monthly income, average monthly income of each income group is calculated. Example:

Income group	Average monthly income
Low income earned group	8211
Lower middle income earned group	16062
Middle income earned group	23880
Middle upper income earned group	35552
Upper income earned group	98575

Source : Department of statistics

Quintile dispersion ratio is estimated using following formula

$$\text{Quintile dispersion Ratio} = \frac{\text{Average monthly income of upper income earned group}}{\text{Average monthly income of low income earned group}}$$

- Quintile dispersion Ratio can be calculated using the information of above schedule as below.
    - Average monthly income of upper income earned group = 98 575
    - Average monthly income of low income earned group = 8 211
    - Quintile dispersion ratio = 12
- The value of 12 in quintile dispersion ratio refers that the income of upper income earned group is twelve time higher than the average monthly of low income earned group.

Competency 11.0 : **Exhibits the interest of contribution to sustainable development by analyzing the diversity of development.**

Competency level 11.5 : **States the way of measuring Poverty by analyzing the concept of Poverty .**

No. of Periods : 08

Expected Leaning outcomes :

- Defines concept. of poverty
- Names different/various measures to measure poverty.
- Explains National Poverty Line.
- Explains Population Poverty Index.
- Explains International Poverty Line.
- Comparatively analyses Poverty among countries using measures of poverty.
- Introduce two natures of poverty.

Guideline to explain subject matters :

- Poverty is he inability to reach minimum partake or for a minimum welfare situation by a person or by a group of people for a particular consumption r income level or housing and educational facilities and human needs identified such as property and other rights based on existing social economic situations.
- Poverty is also identified as deprivation, powerlessness impoverishment and as destitution,
- Poverty can be analysed through various concepts.
- Following indices are used to measure poverty .
  1. National poverty line
  2. Poverty Head Count Index
  3. International poverty line
  4. Other poverty indices such as,
     - Human poverty index
     - Consumption poverty index
     - Multi dimensional poverty index
     - Poverty gap index
- National poverty line is an absolute poverty line on the approach of cost of basic needs and a definite index constructed relevant to fulfill the needs of daily capata food colory consumption and essential non food consumption.

- It is estimated considering the amount spent monthly to purchase needed to maintain minimum physical strength and the amount spent for non essential needs.
- Therefore, the income needed for a poor person to fulfill minimum nutrition level to escape from poverty is known as national poverty line,

  (In Sri Lanka it is estimated that one person need kilo calories 2030 per day)
- Department of Census and statistics publish the value of national poverty line as a real value updating to the price changes monthly.
- People earn an income less than the national poverty line identified as poor.
- Poverty head count index shows the amount of population below poverty line as a percentage of total population.
- Following equation is used to measure poverty headcount index.

$$\text{poverty headcount index} = \frac{\text{Population below poverty line}}{\text{Total population}} \times 100$$

- The rate of population live earning 1.9 US $ daily (Relating to developing countries at years 2015& is known as international povety line.
- When estimating low income earned population in developed countries daily earning of US $ 2.5 is used at the year 2015.
- Poverty in many countries of the world today shows a declining trend.
- Few other indices used to measure poverty are given below.
  - Human poverty index
  - Consumption poverty index
  - Poverty gap index
  - Multi dimensional poverty index
- Human poverty index is a broader is a broader concept which includes many facets of poverty rather than the narrower concept of insufficient income to sustain life.
- Deprivation of choices and opportunities available for a person to live a meaningful life also known as human poverty.
- United Nations Organization considers three facts to measure human poverty.
  1. Absence of long and healthy life
  2. Absence of favorable living standards
  3. Absence of knowledge
- There are two forms of human poverty.

1. Human poverty index constructed for developing countries
2. Human poverty index constructed for developed countries

- Consumption poverty index measures minimum daily capita food calory consumption and essential non-food consumption.
- This index analyzes changes of poverty \based on definite quantities of food and non foods of consumption following changes occur in the costs of those along with time.
- The amount of money needed for a poor person to escape from consumption poverty is known as poverty gap index.

Poverty Gap Index = Total monthly consumption expenditure of a poor person

Distance between poverty line

- This index is constructed considering poverty gap index of a poor person as 0.
- Multi dimensional poverty index measures poverty based on various deprivations that has to be faced by a person at household level instead of measuring poverty through a simple measure that based on income .
- Multi dimensional poverty index is constructed based on deprivations relevant to the three broad fields of health education and living standards.
- The amount of household where the value of deprivation index exceeded 30% considered as poor households.
- Multi dimensional poverty index = poverty head count index X Deprivation index.

  (Explain to students poverty among countries based on updated data relating to above indices)
- There are two forms of poverty
  1. Absolute poverty
  2. Relative poverty
- Absolute poverty means a situation of not receiving an adequate income to fulfill basic needs by a particular person.
- National poverty line and international poverty line show absolute poverty.
- A situation of receiving a relatively low income by a group of people compared to other groups of people due to income disparity is known as relative poverty.
- In this it is considered that how much of total income is received by the 40% of low level of income earners.
- Relative poverty generates with income disparities.

- There are two facts of poverty.
    - Consumption poverty (Income poverty)
    - Human poverty
- Not receiving of an adequate income to maintain a consumption level needed for a minimum level of living is known as consumption or income poverty.
- There are two facets of consumption poverty.
    1. Absolute poverty
    2. Relative poverty
- Consumption poverty is measured through the nutrition level refers to the amount of calories and protein of a daily meal.
- According to the estimates of World Health Organization 2500 calories and 53 g protein needed for a person between 20-30 years of age.
- However, to measure consumption poverty countries of the world use different notorious levels.
- Following that nutrition base for Sri Lanka is 2145 calories.
- The situation of loss of choices and opportunities needed for human development to achieve freedom self dignity and to live a healthy and happy life enjoying others treat as known as human poverty.
- Through human poverty index it is tried to measure the variables that affect human development in an adverse manner.
- Human poverty index is constructed based on the factors such as absence of long life, absence o knowledge and absence of having favourable living standards.

Competency 11.0 : **Exhibits the interest of contribution to sustainable development by analyzing the diversity of development.**

Competency level 11.6 : **Investigates poverty in Sri Lanka.**

No. of Periods : 08

Expected Leaning outcomes :

- Introduces poverty level in Sri Lanka.
- Presents the reasons for regional changes of the poverty in Sri Lanka.
- Presents reasons for poverty in Sri Lanka.
- Proposes steps to minimize poverty in Sri Lanka.

Guideline to explain subject matters :

- Absolute poverty is measured based on consumption poverty.
- To calculate that, income and expenditure data collect from household income expenditure survey which held by sense and statistic department once in three years.
- In recently this survey followed on 2012-2013 years as cover 25 administrative district in Sri Lanka.
- According to this survey, the National poverty ratio decrease to 6.7% for 8.9% according to 2009/10
- According to district wise, the lowest poverty head count index was reported as 1.4% in Colombo district and the highest poverty head-count index was reported as 28.8% in Mulathive district.
- According to provincial wise, lowest poverty head-count was reported as 2.0% in western province and highest poverty head-count index was reported in Uva province.
- According to over-roll wise, the poverty index is 2.0% in urban sector, 7.6% in rural sector and 10.9% in estate sector in Sri Lanka in 2012/13.
- As mention above, the reasons effecting regional changes of poverty in Sri Lanka have been given below,
  - Existence the economic growth in a low level.
  - Increase the population growth in higher rate.
  - Natural disasters
  - Weaknesses of the infrastructure
  - Unfavourable government administration
  - Weakness of education and health services

- Barriers enter to the market
- Largest of the households. Asperity of nutrition level
- Cultural effectiveness
- Internal riots

- The following factors effect for poverty in Sri Lanka
  - Regional factors
  - Increase the, gap of the relationship between relationship urban and market.
  - War riots and annual struggling
  - Agriculture would be the main employment source
- Sectoral factors
  - Existence education quality in low level
  - Existence agriculture productivity in low level.
- Household factors,
  - Existence of more children in a household
  - Low education knowledge
  - Decreases he native assets
  - Addiction for drugs
- The actions to decrease the poverty in Sri Lanka can be shown as below.

1. Increasing the opportunities to increase the standard of living in poverty households.
   - Increase the employment opportunities
   - Supply the health facilities
   - Supply the infrastructures
   - Strengthening the small scale industries
   - Activate the various welfare programmes
2. Empowering he public sector who participate for decision making process.
   - Facilitation the government administration
   - Increasing the capability of reach to legal process
   - Increasing the capability of taking information
3. Supplying the protection to protect from unprotected situations.
   - Controlling the spreading diseases
   - Supplying the insurance coverage
   - Supplying subsidies

Competency 11.0 : Exhibits the interest of contribution to sustainable development by analyzing the diversity of development

Competency Level 11.8 : Analyses Labour Force in Sri Lanka and the ways of computing.

No. of Periods : 08

Expected Learning outcomes :

- Defines Labour Force.
- Computes Labour Force using hypothetical statistical data.
- Explains the difference between working age population and Labour Force.
- Calculates Labour Force Participation Rate.
- Explains characteristics of Labour Force in Sri Lanka.

Guideline to explain subject matters :

- At a certain period of time the sum of all persons in the age limit between minimum and maximum who supply labour and expecting to supply labour in order to produce goods and services with an economic value and with an expectation of a wage or another economic benefit is called labour force.
- In simple labour force s the sum of employed an unemployed people of a country (during the time concerned) during a particular period of time.
- When estimating labour force various countries of the world use various age limits.
- The way of calculating labour force by census and statistics department of Sri Lanka is given below.

Total population		xxx	
Deduct / Minus child dependents less than 10 years		xxx	
Adult dependents over 60 years		xxx	
Active population			- xxx
			xxx
Minus : housewives	xxx		
Fulltime students	xxx		
Self unemployed	xxx		
Labour force			xxx
			xxx

- From total population of Sri Lanka population in the age between 10 and 60 is known a working age population while he amount of population remained a after deducting house wives, full time students, retired , aged, weak or disabled and self unemployed from that working age population is known as labour force.
- Showing labour force as a percentage of working age population is called labour force participation rate.
- $$\text{Labour Force Participation Rate} = \frac{\text{Labour force}}{\text{Working age population}} \text{ X100}$$
- Few recent characteristics that can be seen relating to Sri Lanka's labour force are given below.
- Decrease in working are population
- Increase in labour force participation rate
- Increase in female labour force participation rate
- Relative to female the value of male labour force participation rate remains at a high value.

  (Discuss with students the recent data relating to labour force and labour force participation rate using central bank report)

Competency 11.0 : **Exhibits the interest of contribution to sustainable development by analyzing the diversity of development.**

Competency Level 11.9: **Inquires structural changes of employment and unemployment in Sri Lanka.**

No. of Periods : **08**

Expected Leaning outcomes :

- Defines employment.
- Shows characteristics of employment in Sri Lanka.
- Calculates employment rate.
- Investigates employment rate and its changes in Sri Lanka.
- Defines under employment.
- Illustrates reasons and consequences of under employment in Sri Lanka.
- Defines unemployment.
- Explains unemployment rate in Sri Lanka and its changes.
- Presents reasons for unemployment in Sri Lanka.
- Explains socio-economic consequences of unemployment.

Guideline to explain subject matters :

- According to censes and statistics department definition, employment refers to that a person is participating to an economic process at least one hour, before week to the survey date.
- In simple employment refers to that a person who participate for economic activity for a wage or other economic benefit.
- Employed people of a country can be classified in to four types.

 1. Government and private sector employees.
 2. Employers
 3. Self-employed
 4. Un-paid family labour

- Indicating employed population as a percentage of labor force is known as employment ratio.

- Employment ratio $= \dfrac{\text{Employed population}}{\text{Labour force}} \times 100$

- Explain to students , Sri Lanka employment ratio and changes according your new data of Central Bank report.
- Under employment refers to as imperfect utilization of labour.
- Under employment can be occurred in two ways.

  1.1 Visible under employment

  1.2 Invisible under employment
- Visible under employment refers to non-availability of sufficient work in time.
- Invisible under employment refers to employed in a less competent job than existing competency level.

  Example : a graduate doing a job as a clerk.
- The following reasons have been effected to under employed
  - Non-matching the qualifications of job demanders with needs of labour market.
  - Government fails to occur competency which need for labor market.
  - The economic growth does not increase compare to growth of labour force.
  - Keeping the labour more than the firm needs.
- Sri Lanka has faced the following effects because of under employment situation.
  - Reduction in production of economy.
  - Waste of labour
  - Occur the inequality of income distribution
  - Decrease in labor productivity
  - Facing poverty
  - Occur the anti social activities
- There are four types of unemployment.

  1. Seasonal unemployment

  2. Frictional unemployment

  3. Structural unemployment

• Presenting the unemployment population as a percentage of labour force is known as unemployment ratio.

$$\text{Unemployment ratio} = \frac{\text{unemployed population}}{\text{labour force}} \times 100$$

• Unemployment ratio and changes in Sri Lanka can be shown as below

  • The unemployment ratio f Sri Lanka exist a low level.
  • The unemployment ratio is in higher level among educated youth.
  • The unemployment ratio is in higher level in rural area.
  • The unemployment ratio of female is in higher level.

• There are several reasons for unemployment of Sri Lanka.

• Qualification and skills of job mis matching with labour market needs.

• Because of the respect and acceptance of the job looking new jobs.

• Non generating new jobs because of the low increasing rate in economic growth.

Competency 12.0 : **investigates economic structure and the economic policies of Sri Lanka**

Comparatively Level 12.1 : **Investigates the changes after the independence of Sri Lanka.**

NO. of Periods : **08**

Expected Leaning outcomes :

- Explain the changes after the independence of Sri Lanka.
- Names out the basic characteristics of import substitution industrial policies.
- Explains the basic characteristics of industrial policies.
- Explains the of effects of the import substitution policies of the economy.
- Explains the effects of industrial policies of the economy.
- Defines the export oriented industrial policy and liberalization policy.
- Explain the basic characteristics of export oriented industrial policies and liberalization policies.
- Investigates the effects of export oriented industrial policies and liberalization policies to the economy.

Guideline to explain subject matters :

- Following economic characteristics after independence can be identified with some period

  Period from 1948 – 1960

  Period from 1961– 1977

  Period from 1977 – 1994

  Period from 1994– 2015

- Main characteristics of the period from 1948 – 1960
  - Operation with slight changes of colonial features
  - Influence of world bank over the economy for the first time
  - As an economic development strategy providing strong position towards agriculture and industries
  - Occurring an improvement in agriculture
  - Begin in 8 balance of payments deficit

- Beging in economic planning and implementation
- Following a semi-opened economic policies
- Implementation of broad welfare programes
- Opening of state owned enterprises

- Characteristics of Sri Lanka economy for the period of 1961 – 1977
  - Implementation of inward looking economic policies
  - Controlling foreisn exchange and operation of dual exchange rate system
  - Controlling of imports occurring of exchange rate crisis situation
  - Opening of import substitution industry policies
  - Diversification of exports
  - Opening of large scale state owned enterprises
  - Redistribution of property and assets
  - Reformation of exchange rates

- Characteristics of Sri Lankan economy for the period of 1978-1994
  - Implementation of export oriented industrial policies
  - Implementation of outward looking economic policies
  - Implementation of floating exchange rate system by removing fixed exchange rate system.
  - Elimination of controlling of exchange and controlling of exports.
  - Providing a room to determine price through demand and supply forces with an elimination of controlling policies.
  - Limitation of welfare policies
  - Economic Liberalization
  - Establishing investment promotion zones (IPZs)
  - Implementation of supply side policies such as privatization and restructuring.
  - Implementation of poverty eradicating policies
  - Implementation of economic reforms

- Characteristics of Sri Lankan economy for the period of 1994-2015
    - Implementation of open economic policies further through reformations that strengthen domestic economy.
    - Limitation o foreign investments
    - Slow operation of share market
    - Spent huge amount of money to end north-east war
    - Development of infrastructure
    - Direct towards large amount o foreign debt
    - Broad state assistance towards domestic agriculture and construction industries.
- Import substitution industry policies were implemented during the period of 1960-1977
    - Import substitution policy refers to limiting of imports and prepare a background to domestic production
    - Main objectives of import substitution policy are as follows.
    - Finds a solution for foreign exchange crisis
    - Improving domestic agriculture as a solution for world food crises
    - Development of small and medium scale industries to improve domestic economic growth.
    - Improving agricultural policies to control aggregate demand in order to overcome instabilities of macro economy.
- Main characteristics of import substitution policy are as follows.
    - Showing of policy framework of economic programme that implemented political ideology existed during the period of 1960-1977
    - It was a policy expected balanced growth in agricultural and industrial sectors.
    - It was a policy implemented as a solution for timely economic crisis situation rather than a policy focused on development strategies.
    - First ly luxury goods and non e essential goods imports were controlled and began producing those goods domestically while minimizing benefits gained by intermediaries

through internal exchange of goods. (Limitation of transportation of rice, chillies and salt.)

- Import substitution industries encourage the production of consumer goods such as soap, perfumes, textiles , garments and pharmaceutical industries.
- As import substitution agricultural products encouraged the production of rice, onion, chili, soya, green gram and textiles.

In order to find solutions for the problems exited during the period (foreign exchange crisis, balance of payments problems) imports and foreign exchange were controlled as above.

Foreign exchange policies were implemented in order to support import substitution industrial policy.

- dual exchange rate
- Overvalued fixed exchange rate system
- Closing of capital account to control foreign exchange

Export oriented industrial policy

- Industrial policies with replacing imports are known as : export oriented Indestrial policy
- Industrial policies which competitively targeting foreign market instead of production goods to the domestic market with replacing imports are known as export oriented industrial policies.
- Implementation of export oriented policies were started in Sri Lanka during the period after 1977 after introducing open economic policies or economic liberalization
- Main aim of an export oriented policy is the expansion of the share of world market through export competiveness and export diversification rather than limiting imports.
- Other aims of export oriented policies implemented after 1977 in Sri Lanka are as follows.
    - Solving the balance of payments problems
    - Solving the foreign exchange problems
    - Promotion of export industries as an economic development strategy
    - Attracting foreign investments towards industries which target export
    - Promotion of industries that target exports to expand employment opportunities.

- Expansion of exports towards foreign exchange market expansion.

- Main characteristics of export oriented industrial policies are as follows.
  - It is an economic policy implemented to support open economic policy
  - Eliminating of limits of exports and imports t facilitate free trade
  - Eliminating of foreign exchange limits
  - Establishing of fixed exchange rate system.
  - Devaluation of existed currency by 100% in order to encourage of foreign exchange
  - Lighten foreign exchange market activities and grant permission for foreign banks and financial institutions to enter into the country.
- Lighten and elimination of import tariffs,
- Providing opportunities for competitive exports with an elimination of government monopoly existed in exports.
- The effects of import substitution industrial policy over the economy.
- Creating a strong demand for domestic agricultural products.
- Expansion of agricultural production activities such as paddy, onion, chillies vegetables and fruits.
- Expansion of domestic economic activities including animal husbandry.
- Decrease in the expenditures for imports
- Increase in the price of domestic agricultural products and industrial product due to import ban.
- Decrease in the quality of domestic goods produced for internal market.
- Domestic entrepreneurs in the industrial sector being ore stronger.
- Shortage of agricultural producers and industrial producers.
- Implementation of price controlling policies and rationing policies against increase in price.
- Due to the large foreign exchange deficit occur, central bank has to maintain a large amount of foreign reserves to fulfill the deficit.
- Due to insufficiently lf the inflow of foreign reserves to fulfill huge demand for foreign reserves arising of profiteering situation relating to unofficial foreign exchange.
- To encourage foreign investors providing of tax reliefs, tax concessions and elimination of other legal barriers.

- Establishing of free trade intermediates goods and capital goods to encourage export industrial based on imports (production of textiles and garments(.
- The efficient of export oriented economic policy over the economy.
  - Increase in export competitiveness
  - Export diversification without concentrating n\only on tea, rubber and coconut.
  - Expansion of export market
  - Modernization of export marketing activities
  - Improvement of export earnings
  - Expansion of export based industries

  - Increase in domestic employment
  - Increase of personal income
  - Improvement of infrastructure due to the emergency of free markets (ports, air ports, road transportation).
  - Expansion of economic activities related to free trade.
  - Increase in secondary income due to export of labour and friends solutions for balance of payments problems.
  - Decrease in poverty
  - Increase in savings
  - Increase in wages at the labour market due to lack of trained labour.
  - Find a solution of social capital deficit due to the flow of foreign investment.
  - Flow of foreign technology
  - Flow of foreign trained labour
  - An expansionary effect over total economy's aggregate demand, price level and employment.

Competency 12.0 : Comparatively investigates economic structure and the economic policies of Sri Lanka.

Competency Level 12.2 : Explores the new trends of Sri Lankan economy.

No. of Periods : 08

Expected Learning outcomes :

- Explains the structural changes of Sri Lankan economy by using recent data.
- Analyses employment, foreign employment remittances, infrastructure development, provincial tourism industry and development with recent data.
- Explains the factors affecting to increase or decrease the employment.
- Analyses the new trends in tourism industry.
- Explains the importance of regional development.
- Describes factor s affecting regional development disparities.

Guidance to explain subject matters :

- Structural changes took place within Sri Lankan economy can be presented as follows.
- structural changes of gross domestic product
- structural changes of employment
- Structure of gross domestic production changes as follows.
- Decrease in percentage importance of agricultural sector
- Increase in percentage importance of industrial sector
- Increase in percentage importance of services sector

  Example : Decrease in percentage importance and agriculture
  Increase in percentage importance and Indestrial
  Increase in percentage importance and Service sector
- Structure of employment changed timely.
- Percentage of employment in Agricultural sector has been decreased.
- Percentage of employment in industrial sector has been increased.
- Percentage of employment in industrial services has been increased.

Employment from 1963 – 2016

Sector	1963	1973	1981/82	1996/97	2003/04	2013	2015	2016
Agricutural	46.3	37.8	28.6	27.6	26.3	19.9	8.5	8.1
Industrial	36.9	45.4	47.9	42.8	47.7	52.8	54.6	56.3
Services	37	34	29	37	40	40	44	44

- Few reasons can be shown for the decrease in percentage importance of agriculture sector and increase in percentage importance of industrial and services sector within sectorial composition of employment of gross domestic product as follows.
- Increase in labour productivity of agricultural sector when transferring excess labour in agricultural towards industrial sector.
- Increase in income of industrial sector employees, when increasing industrial sector employment.
- When increasing of industrial sector employees there will be high income elasticity of demand for industrial goods and services.
- Within demand structure when demand for industrial products and services increase rapidly than agricultural products change in production structure along with it.
- It is seen that after 1977 as Sri Lanka transferred to a more open economic style an increase in the trend of Sri Lankan employees towards foreign employment. As a result the value of worker remittances have been increased.

Foreign employment	2017		2015		2016	
	Number	Precentage	Number	Precentage	Number	Precentage
Total foreign employment	30073	100	263443	100	242930	100
by gender						
Male	190217	63.3	172788	65.6	16032	66.0
Female	110486	36.7	90655	34.4	82628	34.0
By manpower category						
Professional	5372	1.8	6251	2.4	6574	2.7
Middle level	20778	6.9	6951	2.6	8235	3.4
Clerical and related	29267	9.7	12501	4.7	19864	4.5
Skilled labour	73162	24.3	81682	31.0	76559	31.5
Semi-skilled labour	3977	1.3	4847	1.8	3939	1.6
Unskilled labour	79519	26.4	77985	29.6	71641	29.6
Housemaid	88628	29.5	73226	27.8	65127	26.8

Recent trends of foreign employment :

- It was recorded 7.8% decrease in the number of people who went abroad for foreign employment during 2016.
- The reasons to decrease the number of foreign employment due to the policy decisions made by the government to reduce the number of housemaids going abroad and training needs that should be fulfilled before departure and reduce the demand of labour caused by the economic recessionary of middle east countries.
- Policy decisions made by the government to reduce the number of household going abroad, raining needs that should be fulfilled the reduce in labour demand due to recessionary situation occurred in middle east countries were the reasons affected the continuous decrease in the number of people went abroad for foreign employment.

- Even with migration the depart of employment for Korea shows the development but large percentage include (97%) with unskilled labours.

- Foreign remittances inflows would be increased with skilled foreign employment increases.

- As proposed of a foreign employment bureau in the budge 2017, the minimum wage is $ 350 for a unskilled labour and $ 450 for skilled labour.

- The foreign currencies and other things which are sent by Sri Lankan labour of foreign employment is known as foreign remittances, Foreign remittances are the most importance one in the total foreign receipts of Sri Lanka.

- Foreign remittances of employees can be illustrated below

	Origin2012	2013	2014	2015	2016	
1.	Middle East	3358	3562	3902	3796	3889
2.	European Union	1071	1160	1270	1222	1282
3.	Asia	509	557	611	698	739
4.	Other European Countries	275	308	337	307	333
5.	North America	174	186	204	209	210
6.	North South Asia	63	288	316	391	398
7.	Australia and New Zealand	132	147	161	161	174
8.	South Asia	90	83	91	98	109
9.	North and Central America	48	58	63	63	51
10.	Other	66	58	63	63	51
	Total	5985	6407	7018	6980	7242

- Foreign remittances receipt recorded a moderate development in 2016. In the past years foreign remittances have decreased because of the decrease in the foreign employees of middle east gradually and decrease in demand of labour with the economic recession of middle east countries.

- Effects of foreign employment and foreign employment remittances.
  - Cause for decrease the unemployment
  - Increase the personal income
  - Decrease the poverty
  - Increase the small entrepreneurship by increase in household savings

- Increase in small entrepreneurs by increase in household savings
- Developing the foreign earnings
- Main solving for BOP problems
- Strengthen the foreign assets
- Increase in the foreign (external) value of currency.
- Increase in the wages level and a lack of skilled labour occurred in a labour market
- Contract the resource endowment when the skilled labour migrate to foreign countries.
- Occur the social problems. isolations, and unprotection of children with the migration of women for household service,

- The capital that supports increase the standard of living and to create and effectiveness of the production and exchange process is known as infrastructure, Infrastructure can be classified as follows.

Infrastructure facilities

- Economic Infrastructure
  - Hard Infrastructure
    - Roads
    - Highways
    - Bridges
    - Tunnels
    - Railway lines
    - Irrigation
    - Air ports
    - Harbour
    - Telecommunication
    - Transportation
  - Soft Infrastructure
    - Occupational training programmes
    - Financial facilities
    - Research and develop ment facilities
    - Technological exchange
    - Intentives of exports
- Social Infrastructure
  - Hard Infrastructure
    - Hospital
    - Schools
    - Provision of water
    - Housing
    - Child protection
    - protection
    - Jails
    - Waste disposal
  - Soft Infrastructure
    - Social protection
    - Community services
    - Projects of environ- mental protection

- Investment for infrastructure refers to build structures of physical and organizations for supply necessary services and facilitates to operate the economy efficiency. Infrastructure is a important index that shows the development of a country or the regional development

- Infrastructure can be divided in to two sub topic as economic and social infrastructure. Economic infrastructure refers to roads, provision of water and facilities of water transportation, telecommunication facilities Social infrastructure refers to schools, universities, hospitals, housing development.

- The investment of infrastructure contribute to the economic development in various ways, Insufficient infrastructure is a main barrier of the development process of a country. Unsatisfactory roads, traffic jam, thinking more time to go s short distance, are the simple barriers for the development process.

- Developing the roads, bridges, harbor, railway lines, telecommunication net, irrigation facilities are very helpful for the economic development.

- Production and distribution of goods and services to the market can be done very easily and effectively when the infrastructure has developed.

- It has fond out by the research and studies that long run production will develop by 1% with the 10% of infrastructure facility increase.

- Economic and social important factors of infrastructurefacilities are,
    - Increasing the productivity
    - Increase in economic development rapidly
    - Cause to increase the attraction of foreign investors.
    - Cause to decrease the private cost of investors.
    - Cause to minimize the wastages.
    - Efficiency the management and coordination.
    - Cause for social development.
    - Cause for occurred human capital
    - Increase in the economic competition.

- There are several sources approaching infrastructure development.
    - Government investments for infrastructure.
    - Voluntary investments for infrastructure.
    - Public private partnership for infrastructure.

Government investments for infrastructure can be illustrated below

Government investments for infrastructure.

Year	Economic services		socail services		Total	
	Rs Billion	As a percent-age of G.D.P	Rs Billion	As a percent-age of G.D.P	රුපියල් බිලියන	As a percent-age of G.D.P
2012	343.8	3.9	71.2	0.8	415.0	4.8
2013	369.4	3.9	77.6	0.8	447.0	4.7
2014	330.1	3.2	112.3	1.1	442.5	4.4
2015	429.0	3.6	117.3	1.0	541.3	4.6

- There are nearly 5% of government investments as a percentage of Gross Domestic Product for infrastructure development in Sri Lanka.
- But it is necessary to improve the development of infrastructure. Investment is a process to increase the competition of the economy, to each the maximizing level of economic growth and to increase the attraction of the direct foreign investments. The powerful barriers for this situations are the limitation of government revenue, preventing the increasing of government loans, limitedness of the capability of debt payments. According to this situation, it is important increase the attraction of private investments to supply the infrastructure under the public private partnership.
- The approval for establish a unit of public private partnership in the ministry of finance with the supporting of USAID institute and the world bank has received to encourage the private sector for development of infrastructure under the public private partnership.
- It should be creative suitable regulation and administration mechanism to encourage private investment and increase the quality of services and certify a fair prices and the knowledge of politicians and policy formulators by encouraging policy frame of public private partnership. It should be completed the former requirements like fixed policies, good governance, increasing the capability of institutions, transparency, productive regulations and efficiency financial markets to promote the private investments in economic and social infrastructure. Herewith, the infrastructure. Projects should be focused to a broad study to identify priorities of project how to gain more beneficial to confirm the efficiency of the resource allocating.

The pubic and private partnership for infrastructure development.

- "The public private partnership is a successful methodology in development of infrastructure.. The projects can be activated by choosing the possible activities themselves which they can do possibly by involving both parties on behalf of doing activities by private sector or public sector.

- The lateness can be prevented by increasing the time duration to finish project. The time duration to end of the project can be used as an index of measuring the progress.
- It can be achieved more marginal project investment of public and private partnership than a public project or a private project. It is occurred an opportunity to use innovative methods according to planning and financing when both parties act together.
- The feasibility is determined by evaluating the condition of project. The private sector would not be agreed to do that if there is a planning to active project without feasibility with pubic or political necessities and other aspirations.
- The government occurs an opportunity to transfer bearing risk of the implementation and carry out the projects for the private sector who has more experience to control the cost.
- All projects can be finished more efficiency because of the bounces include in public and private partnership.
- The opportunity would occur to concentrate the limited funs of government to the other sectors which is important in economic and social conditions
- It is favourable for government financial simulation because of more efficiency of public partnership. It is contributed to decrease the budget gap.
- It can continue higher standard level in every sages of the life cycle.
- The tax burden also would be decreased because of the government revenue decreasing.

  The public private partnership project can be shown as an alternative approach which can be faced successfully when there is a social discrepancies.

Tourism Industry

- The Sri Lanka tourism industry, a major foreign currency earner in the economy continued its growth momentum during 2016. Tourist arrivals crossed the two million milestone for the first time in the history, reaching 2,050,832 arrivals, recording impressive annual growth of 14.0 percent in 2016.
- The factors which help to promote tourism industry
- The significant increase in tourism related infrastructure development and investments.
- Opportunity of new airlines and cruise lines.
- Operate the specific promotional campaigns to increase the international relationship.
- Increased geo-political tension in a major tourist destinations of the world also helped Sri Lanka attract tourism.
- Tourist arrivals from all major regions, except Africa increased in 2016 Western Europe continued to be the largest region of tourist origin for Sri Lanka, representing 31.4 percent and the number of tourist arrivals is 643,444.
- The share of tourist arrivals from East Asia is 20.7 percent. India is the largest country of tourist arrivals in 2016 while china remain second and United Kingdom is the third. It terms of the purpose of visit, a majority of tourists visited the country for holidays.

- Earnings from tourism contained its growth and strengthening of the service account. The total tourist earnings are us dollars 3,518 million in 2016 and earnings from tourism grew by 18.0 percent.
- The tourism sector investment expanded further during 2016, approval was granted for 41 new hotel projects with an investment of us & 126 million compared to 37 projects approved in 2015.
- The tourism industry in the Eastern and Northern provinces of country continued to grow with local and foreign investors, focusing their attraction on harnessing the high potential for tourism in these provinces.
- Although vigorous promotional companies carried out during the last few years and initiatives taken to relate to the tourism industry helped to attract tourists, Sri Lanka has not yet tapped into its full potential in the global market.

Performance in the tourism sector can be presented as follows.

Item	2012	2013	2014	2015	2016	Changes 2016
Tourist arrivals	1,000,605	1,274,593	1,527,153	1,798,380	2,050,382	14.0
arrivals by purpose of visy						
Pleasure	748,436	915,208	1,037,644	1,198,240	1,710,027	42.7
Business	90,040	67,946	20,270	23,323	37,121	59.2
Other	167,129	291,439	469,239	576,817	303,684	-47.4
Tourist guest weight	10,056	10,909	15,119	18,163	20,918	15.2
Room ocupancy rate	71.2	71.7	74.3	74.5	74.8	0.4
Gross Tourist receipts	132,427	21,72	317,79	405,492	512,373	26.4
Percapita tourist recipts	131,688	173,594	207,889	225,476	249,837	10.8
Total emplyment	162,869	270,150	299,890	319,436	335,659	5.1
Direct emplyment	67,862	112,550	129,790	135,930	146,115	7.5
Indirect emplyment	95,007	157,600	170,100	183,506	189,544	3.3

- The contribution of tourism industry concern to the foreign earnings and employment can be represented as follows.

Foreign exchange earnings

Unit of currency	**2015**	**2016**
Sri Lankan Rupee Milion	405, 492	512,294
US Doller milion	2981	3518

- The contribution of tourism industry for total foreign earnings is 12% in 2015 and 14.2% in 2016. The tourism industry got the third place after workers' remittances and textiles and garments.

Contribution of employment

	2014	2015	2016
Direct employment	129790	135,930	146115

- The direct and indirect employment is 319,436 in 2015 and it is 335659 in 2016.
- The following has been identified by specialist as key challenges in the tourism industry of Sri Lanka.

  - Inadequacy of hotel rooms in relation to the expected tourism growth; according to the Sri Lanka tourism promotion in 2016. It is estimated that about 40000 to 50000 rooms are required , where only about 30000 hotel rooms are available in both tourist hotels and supplementary establishments as at end 2016.

  - A large number of trained Sri Lanka manpower in the hospitality industry is employed in other countries for higher wages As the government along could not provide the required training a partnership with the private sector is required to later to the growing requirement of skilled labour in the tourism industry

  - Despite recent interest shown by global hotel chains on Sri Lanka, it is observed that many leading hotel chains have not yet expanded their businesses to Sri Lanka sufficiently. As per the top ten international luxury hotel brands named by Forbes magazine, only three are represented in Sri Lanka at present. Despite the formal sector of the tourism industry being highly regulated, there is a significant informal sector operating within industry. Hence, attention is required to absorb the later into the formal sector, there by, enabling proper regulation. The informal sector needs to improve the safety and ethics on tourism, as failure to do so would lead to the diminishing of the positive image of the country.

  - Ability to cater to the growing tourist arrivals from China which has a huge potential.

  - Current developments in the tourism industry has created new challenges in catering to the growing arrivals of Chinese tourists, where a dedicated Chinese language TV and radio channel and Chinese speaking tourist guides, etc. are required.

  - Average duration of stay, calculated as the number of nights, has stagnated over the years. Despite the receipt per tourist per day having grown over the years, the average duration of stay has stagnated to around 10 guest nights over the years mainly due to the lesser number of activities available is needed to diversify the availability of tourist activities in Sri Lanka. Where more emphasis should be made towards logging sector of the tourism industry. Such as marine and cruise tourism, leisure tourism and recreational tourism in order to target average guest night to at least two weeks.

• There is a need for increasing the number of multipurpose tourist information centers at key tourist attractions and major transport hubs, which provide only informations but a diverse range of tourist related services such as bus, trains taxi and hotel bookings, mobile connections Wi-Fi tour planning etc.

• A high level governmental body is needed for the oversight of all stakeholders of tourism industry, including tourist related government organizations, along with the private sector there by allowing the implementation of higher level strategies in a more collaborated manner.

• The knowledge economy is a system of consumption and production based on intellectual capital. The knowledge economy typically represents a large component of all economic activity in developed counties. In a knowledge economy a significant part of a company's value may consist of knowledge.(Intellectual capital). However, generally accepted accounting principles do not allow companies to include these assets on balance sheets.

• Less developed countries tend to have agriculture and manufacturing based economic while developing countries tend to have manufacturing and services based economies. Example of knowledge economy activities included research, technical support and consulting.

• In the information age, the global economy moved towards knowledge economy. This transition to the information age includes the best practices taken from service – intensive, manufacturing intensive and labour intensive types of economies. In addition knowledge based factors create an interconnected and global where sources of knowledge, such as human expertise and trade secrets, are crucial factors in economic growth and considered important economic resources.

The Knowledge Economy

• The knowledge economy addresses how education and knowledge – typically called Human Capital can serve s a production asset or a business product .

• Intellectual services and products can be sold and exported and can yield profits for individuals, the business and the economy.

• The important concepts related to the knowledge economy

  • Intellectuals
  • Intellectuals engineers
  • Capital knowledge
  • Capital of intellectual
  • Capital of property
  • Intellectual property
  • Sri Lankan economic growth level is in a low level.
  • Because of this social education level is lower

- Because of this human capital accumulation has decreased.
- The funds which are used for research and development are in a low level.

- Because of the industrial progress based on low competency and low wages in Sri Lanka it has been decreased the capability of trend to the process of knowledge based economic growth.
- Limited the foreign donations and aid for Sri Lanka with transferring from lower income earning country to a lower middle income earning country.
- Because of this amount of money for investment activities education, trainings, research and development has decreased.
- The opportunities of capital formation has been decreased because of the most direct foreign investment inflows to labour intensive method with less technology industries.
  - The following components has been used for create the knowledge economic index.
  - Economic incentive and structure of the institution.
  - Innovations and trend to utilizing the technology.
- The countries which have got the dominant place according to the index in the year index 2012. Sweden, Finland, Denmark, Netherland, Norway
- After the independence of Sri Lanka, more profits of development projects are gained by the urban sector. Because of these high level economic growth and social development has occurred in Colombo district of the western province.
- The balance regional development projects has to operate in selected districts because of that other provinces and districts are owned low development level parallel to that.
- In east northern and Uva unemployment, inequality income distribution and poverty are in high level and infrastructure and poverty are in high level and infrastructure and development of human competency is in low level. Because of that it is necessity to operating regional development programs that districts, The various types of project has been identified.

Competency 12.0 : Comparatively investigates economic structure and the economic policies of Sri Lanka.

Competency Level 12.3 : Inquires the contemporary economic issues and policies.

No. of Periods : 04

Expected Learning outcomes :

- Explains the ways of affecting the domestic and global issues over the economy.
- States the examples for domestic and global economic issues.
- Explains the factors affecting domestic and global issues.
- Explains the contemporary economic policies.

Guideline to explain subject matter :

- At present every country of the world opens to rest of the world in various ways. That is, there are no closed economics . Therefore, for operational economic activities are not only domestic phenomenon but also global phenomenon effected in a strong manner.
- Here, domestic and global phenomenon would be effected from various economic sectors directly or indirectly. Therefore, it would be effected for following sectors in macro-economic.
  - production
  - employment
  - price level
  - interest ratio
  - international trade
  - balance of payment
  - foreign exchange ratio
  - capital market
  - There are several examples for domestic effecting phenomenon to the economy.
  - Change in government power.

Example :

- Because of the open economic policies operated by the new government which came into power in 1977, perfectly changed the foreign trade pattern, domestic trade pattern, structure of industry, financial and banking system.

- Because of the economic policy changed with the government power changes in 1994, the direction of economy changed in a certain quality. Accordingly, there was happened so many changes like, decrease the openness of the economy in small quantity, changed the privatization policies, policies, of price stability, minimizing the unemployment problems, strengthening law and peace furthermore.
- According to changing government power in year 2005 operated new planning an economic policies to strengthen the domestic economy.
    - 2006 – 2016 ten years plan
    - strengthening the domestic agricultural sector
    - limiting the order of privatization
- With the changing of government power in 2015 following changes has occurred. confirmation the rule of law, tend to socialist market economy.
- Discussion on good governance, creating national conciliation entering to sources of renewable energy.
- Military situation from 1983 to 2009/30 years of ethnic problems

  Because if this, the economic infrastructure, industries, agriculture farms and decreased the population, increased the unemployment, increased the underemployment of resources and government have to spent more for security.
- Existed civic wars in other areas of the Island from 1989 to 1991

  This reason also effected to decrease the production, increase the price level and to destroy the resources, property and infrastructure.

  (After natural disaster from time to time
- Tsunami situation was occurred in 2004
- Landsides and flood situations from time to time
- Drought situation occurred from time to time
- Damages situations form wild animals.
- For global phenomenon effected for economy can be,
- The examples for global phenomenon effected for economy can be presented as follows.
    - Financial crisis is South – east Asia
- Because of this, the financial market of south-east Asia faced situation of more pressure, and devaluated highly the foreign currency units. Therefore, devaluation of Sri Lankan rupee, and increased the prices of goods which import from that zone.
    - Economic crisis in Europe

      Because of the economic recession occurred in American and Europe zones in 2006,unemployment decreased the production and increase the unemployment Price level increased rapidly. In PEEGs countries have occurred debt crisis. This has occurred large effect for imports market of Sri Lanka, foreign employment, and decreasing foreign investment.

- Continuously crisis occurred between countries in global economy.
- Because of this situation of war in Iraq, Syria, Afghanistan and North Korea, occurred increasing price of petroleum, decreasing the foreign investments and decreasing the exports market in Sri Lanka.
- Increasing the prices of petroleum and Gold in the world.

  Because of this, increasing imports expenditure, deficits of Bop, decreasing the external (foreign) value of Rupee, increasing the inflation combines with energy effected to Sri Lanka.
- Food shortage in the world

  In the year 2000, food shortage has occurred in the world because of the effect of countries which producing foods and using more food for fuel production. As result of that prices of goods that import to Sri Lanka like milk powder and sugar has increased rapidly.
- Increase in global temperature and natural disasters.

  The oceans water would increase because of the increase the global temperature due to releasing unfavourable air to the atmosphere with the rapid industrialization. Accordingly, destroy in the marina resources, decrease in productivity of crops also. These situations are effected for Sri Lankan economy badly.
- There are several factors that effect for domestic and global phenomena.
  1. Natural phenomenon
  2. Human phenomenon
  3. The new trends which occur in the world economy

     Example : The awakened economy to china and India.
  4. Crashes of financial market in Europe and America
  5. Government debt crisis which occurred in European countries
  6. Activities in World Bank, International monetary fund.

- Pay attention to Sri Lanka economic policies which implemented on decade of as contemporary economic policies.
  1. Regaining Sri Lanka economic policy 2001
  2. Economic policy direct towards strengthening domestic economy 2005