Gross Domestic Product

1. Gross Domestic product (GDP) (A/L 2012)
   1) Is the sum of all exchanges of goods and services during a given year.
   2) Includes financial transactions such as the purchase of stocks or bonds traded during a given year.
   3) Includes the purchases of good at intermediate stages of production.
   4) Is the sum of the total spending on all final-user goods and services produced domestically during a given year?
   5) Includes all goods and services produced during a given year.

2. Which of the following statements defines the Gross Domestic Product? (A/L 2018)
   1) The total quantity of output produced by an economy in a given time period.
   2) The total market value of all output produced by an economy in a given time period.
   3) The total market value of all final goods and services produced by an economy in a given time period.
   4) The total value of all final goods and services sold in the domestic market in a given time period.
   5) The total market value of all final goods and services produced by an economy minus the market value of final goods and services exported to other countries in a time period.

3. In calculating GDP all of the following are excluded except (A/L 2012)
   1) The value of intermediate goods.
   2) The value of all homes built in the year in question.
   3) The value of used goods.
   4) Purely financial transactions.
   5) Subsidies from the government.

4. Which of the following would not affect the size of real GDP? (A/L 2013)
   1) A consumer purchases a new car for personal use.
   2) The government purchases a new bus for the defense academy.
   3) A consumer purchases a haircut from a hairdresser.
   4) An investor purchases a rare renaissance painting at an auction.
   5) A firm purchases a new power generator for its factory.

5. What are the limitations of GDP as a measure of people's living standards of an economy? (4 marks)(A/L 2018)

National accounting

6. Explain why an economy's total output in essence is also its total income. (2 marks)(A/L 2012)

7. What are the three approaches in measuring aggregate economic activity of a country? Why do these three approaches give the same value for aggregate economic activity? (4 marks)(A/L 2015)

8. Explain how Gross Domestic product (GDP) is calculated using the three approaches and show how GDP at market prices is different form Net National Income. (4 marks) (A/L 2017)

9. In what ways are national income statistics useful? (4 marks) (A/L 2015)

Production boundary

10. In national accounting, which one of the following activities is excluded from the production boundary? (A/L 2020)
    1) Services of unlicensed medical practitioners
    2) Services of owner-occupied dwellings
    3) Goods produced by households
    4) Provision of education free of charge by the government
    5) Caring for sick and old people by the members of the household

11. Why some productive activities are not measured and thus, are not included in (GDP)? Is this a serious problem in estimating the total output of a country? Explain your answer. (4 marks)(A/L 2012)

12. What is the "underground economy"? How might its size be reduced? (4 marks)(A/L 2013)

13. Which of the following are included in this year's GDP? Explain your answer in each case. (5 marks) (A/L 2012)
    (a) Interest received on corporate bonds
    (b) Pension payments received by a retired public servant
    (c) The purchase of an insurance policy
    (d) The purchase of 100 shares of a finance company
    (e) Rent received on an apartment

14. Explain whether the following transactions are included or not included in GDP of a country. (4 marks)(A/L 2016)
    (a) A tourist hotel purchases Rs. 10 million worth of foreign made canned food.
    (b) A soft drink manufacturing company builds a new bottling plant in the capital city.
    (c) An investor buys Rs. 30 million worth of shares of a major commercial bank.
    (d) A book publisher produces too many copies of a new book. The surplus copies that did not sell this year were added to the inventories.

15. State whether the following items are included or excluded in the measurement of current year's GDP in a country and explain your answer in each case. (4 marks)(A/L 2018)
    (a) A housewife grows vegetables in her home garden during the current year and the entire harvest is used for home consumption.
    (b) A retired worker receives a pension payment from the government.
    (c) A motor vehicle dealer earns a commission for selling a second-hand car.
    (d) A mother helps her daughter to learn a lesson in mathematics at home.

16. State whether the following activities are included in the calculation of Sri Lanka's Gross Domestic Product and explain the reasons for your answer. (5 marks)(A/L 2020)
    (a) An investor purchases Rs. 1 million of newly issued shares of a Sri Lankan company.
    (b) Construction of a new house worth of Rs. 50 million.
    (c) The purchase of Rs. 50 000 worth of fish by a restaurant in Colombo from a fisherman.
    (d) Collection of Rs. 5 000 worth of bee honey by a farmer from a nearby forest.

(e) A research project costing Rs. 10 million completed by an university research team on the economic impact of Covid – 19.

Output approach

17. The difference between Gross Value of Output (GVO) and Gross Value Added (GVA) is (A/L 2020)
    1) Consumption of fixed capital
    2) Intermediate consumption
    3) Net indirect taxes
    4) Net primary income
    5) Primary inputs

18. Which one of the following is a component of the Gross Value Added (GVA) at basic price? (A/L 2019)
    1) Intermediate consumption
    2) Changes in inventories
    3) Acquisition of valuables
    4) Taxes less subsidies on the product
    5) Other taxes less subsidies on production

19. Assume that a hypothetical economy contains only three industries. Industry A using imported inputs of Rs. 30 million to produce an output, sold for Rs. 100 million to industry B. Industry B, using no imports, sells part of its output to industry C for Rs. 300 million and exports goods to a foreign country for Rs. 60 million. Industry C uses Rs. 30 million of imported inputs and sells Rs. 500 millions of its output to final consumers. What is the Gross Domestic Product (GDP) of this economy? (A/L 2018)
    1) Rs. 440 million
    2) Rs. 500 million
    3) Rs. 900 million
    4) Rs. 960 million
    5) Rs. 990 million

20. What is value added? How is it calculated? (4 marks)(A/L 2016/2018)

Expenditure approach

21. To calculate GDP from the expenditure side, one must add together (A/L 2015)
    1) Wages, profits, government purchases and net exports.
    2) Wages, rent, interest and profits.
    3) Consumption, investment, government purchases and exports.
    4) Consumption, investment, government purchases and net exports.
    5) Consumption, government purchases, taxes and interest.

22. At present, the largest component of gross domestic capital formation in Sri Lanka is (A/L 2015)
    1) machinery and equipment
    2) financial assets
    3) land improvement and plantation development

4) changes in stocks
5) construction

23. Which of the following expenditures would be included in the calculation of gross fixed capital formation? (A/L 2017)
    1) Buying a newly constructed house.
    2) Buying a new luxury car.
    3) Buying 1000 shares of stock of a manufacturing company.
    4) Commission paid to a stock broker for selling stocks.
    5) Money spent on corn cultivation in a five hectare plot of land.

24. Which of the following household purchases will be counted as a component of gross private investment in estimating country's Gross Domestic Product using a expenditure approach? (A/L 2019)
    1) Sovereign bonds.
    2) Shares of a company.
    3) Debentures issued by an investment bank.
    4) A new car for personal use.
    5) A newly constructed house

25. In one year, total spending on consumption, investment and government purchases was equal to 103 percent of a country's Gross Domestic Product. This would be possible only if (A/L 2013)
    1) The money supply increased.
    2) Net exports were positive.
    3) Net exports were negative.
    4) The government ran a budget surplus.
    5) The government had a balance budget.

26. The national income data of a hypothetical economy is given below. (All figures are in Rupee million) (A/L 2014)

Private consumption expenditure	1200
Private investment expenditure	400
Government purchasing	300
Export earnings	180
Gross Domestic Product	1920

What is the value of trade balance in this economy?

1) Rs. –160 mn
2) Rs. –20 mn
3) Rs. 20 mn
4) Rs. 80 mn
5) Rs. 160 mn

27. Selected macroeconomic data for an economy is given below. (Figures are in Rs. Billion) (A/L 2012)

Government purchases	500
Wages and other supplementary labour incomes	2000
Depreciation	400
Gross investment	400

Private consumption	2200
Net Exports	– 50
Net indirect taxes	150

Net Domestic Product at market prices equals.

1) Rs. 2650 billion
2) Rs. 3050 billion
3) Rs. 3150 billion
4) Rs. 3400 billion
5) Rs. 4650 billion

28. Explain the following terms. (4 marks)(A/L 2018)
    (a) Inventory investment
    (b) Non-produced non-financial assets

29. What are the major components of Gross Fixed Capital Formation? (4 marks)(A/L 2017)

30. What do you mean by changes in inventory? Why are changes in inventories included as part of investment spending? (4 marks)(A/L 2013)

31. Which of the following items of government expenditure are 'collective' and which are 'individual'? (4 marks)(A/L 2019)
    (a) Fertilizer subsidy
    (b) Medical research
    (c) Police and fire brigades
    (d) School mid-day meal

32. "A country that spends more than its total national income must have a deficit in the trade balance." Comment on this statement. (4 marks)(A/L 2013)

33. What are the main sources of national savings in Sri Lanka? (4 marks)(A/L 2015)

34. Assume you have been given the following data for a hypothetical economy. (4 marks)(A/L 2018)

Item	Value (Rs. Million)
Gross Domestic Fixed Capital Formation	800
Private Consumption Expenditure	3000
Net Primary Incomes from abroad	100
Government purchases	900
Changes in stocks	-50
Exports	450
Imports	600
Net Taxes on production	150

Calculate the GDP at market price.

35. You have been given the following data for a hypothetical economy. (4 marks)(A/L 2020)

Item	Value (Rs. Billion)
Aggregate consumption expenditure	10 000
Gross domestic capital formation	4 000
Export of goods and services	3 500
Import of goods and services	4 500
Net primary income from the rest of the world	– 400
Net current transfers from the rest of the world	1 000

Calculate the following based on the above data.

(a) Gross National Income

(b) Gross National Savings

36. The information pertaining to a hypothetical economy for a particular year is given below. (All figures are in Rs. Million) (12 marks)(A/L 2014)

Private consumption expenditure	800
Government Purchasing	150
Imports	60
Domestic private investment	200
Factor income from abroad	40
Change in inventories	50
Depreciations	40
Exports	80
Factor payment to abroad	60
Purchasing of raw materials	20
Purchasing of shares and bonds	15

For this economy,

(a) Construct aggregate demand equation

(b) Calculate Gross Domestic Expenditure

(c) Calculate Gross National Expenditure

(d) Calculate Net National Expenditure

37. Suppose you are given the following information about a hypothetical economy. (All figures are in Rs. Million) (8 marks)(A/L 2015)

Item	Value	Item	Value
Gross private domestic investment	70	Government transfers to households	25
Government purchases	50	Interest payments from the government to households	15
Gross Domestic product at market price	400	Factor income received from abroad	07
Current account balance of the balance of payments	-25	Factor payments made to abroad	12

Taxes	100	Net foreign current transfers	10

Calculate the following, using the above information.
(a) Net exports
(b) Private consumption expenditure
(c) Disposable Gross National Income
(d) Government savings

<u>Income approach</u>

38. The main components of primary income are (A/L 2020)
    1) compensation of employees, gross operating surplus and net taxes on production and imports.
    2) compensation of employees, operating surplus and other net taxes on production.
    3) compensation of employees, gross operating surplus and mixed incomes.
    4) compensation of employees, operating surplus and consumption of fixed capital.
    5) compensation of employees, gross operating surplus and other net taxes on production.

39. What is not included in the measurement of Gross National Income (GNI)? (A/L 2018)
    1) Financial benefits aid to the unemployed
    2) Dividends paid to shareholders
    3) Profits retained by companies
    4) Rent paid to landlords
    5) Property incomes paid to resource owners

40. Which of the following is considered a property income? (A/L 2019)
    1) Wages and salaries
    2) Interest
    3) Employers contribution to Employees Provident Fund
    4) Non-Life Insurance claims
    5) Subsidies

41. Which of the following is included in the calculation of personal income, but not in national income? (A/L 2016)
    1) Corporate dividends
    2) Transfer payments
    3) Social security contributions
    4) Undistributed corporate profits
    5) Net interest

42. If personal income exceeded national income in a particular year, it can be concluded that (A/L 2020)
    1) the amount of transfer payments exceeded the sum of social security contributions, corporate income taxes and undistributed corporate profits.
    2) the sum of social security contributions, corporate income taxes and undistributed corporate profits exceeded transfer payments.

3) the sum of social security contributions and corporate income taxes exceeded indirect taxes.
4) the amount of transfer payments exceeded the sum social security contributions, corporate income taxes and indirect taxes.
5) the sum of corporate income taxes and indirect taxes exceeded the sum of transfer payments and undistributed profits.

43. What are the major components of aggregate income? (4 marks)(A/L 2016)

44. Why are interest payments by the government considered part of personal income but not part of national income? (4 marks)(A/L 2013)

45. Consider the data given below for a hypothetical economy. (Figures are in Rs. Billion) (5 marks)(A/L 2012)

Item	Value	Item	Value
Wages, salaries and other labour incomes	255	Net exports	11
Indirect taxes	25	Depreciation	40
Interest incomes	55	Subsidies	20
Undistributed corporate profits	72	Corporate income tax	18
Property incomes	34	Dividends	16
Incomes of self-employed	80	Net foreign factor incomes	5

Using the above data, determine GNP at market price.

46. You have been given the following data for a hypothetical economy. (8 marks)(A/L 2019)

Item	Value (Rs. Billion)
Compensation of employees	2500
Gross operating surplus	6000
Consumption of fixed capital	700
Other taxes less subsidies on production	50
Taxes on products	1200
Subsidies on products	250
Net primary income from the rest of the world	– 400
Net current transfers from the rest of the world	1000

Calculate the following based on the above data.

(a) Gross Value Added at basic price
(b) Gross Domestic Product
(c) Net National Income
(d) Gross National Disposable Income

Answers

Gross Domestic Product

1. Gross Domestic product (GDP) (A/L 2012)
    1) Is the sum of all exchanges of goods and services during a given year.
    2) Includes financial transactions such as the purchase of stocks or bonds traded during a given year.
    3) Includes the purchases of good at intermediate stages of production.
    4) **Is the sum of the total spending on all final-user goods and services produced domestically during a given year**
    5) Includes all goods and services produced during a given year.

2. Which of the following statements defines the Gross Domestic Product? (A/L 2018)
    1) The total quantity of output produced by an economy in a given time period.
    2) The total market value of all output produced by an economy in a given time period.
    3) **The total market value of all final goods and services produced by an economy in a given time period.**
    4) The total value of all final goods and services sold in the domestic market in a given time period.
    5) The total market value of all final goods and services produced by an economy minus the market value of final goods and services exported to other countries in a time period.

3. In calculating GDP all of the following are excluded except (A/L 2012)
    1) The value of intermediate goods.
    2) **The value of all homes built in the year in question.**
    3) The value of used goods.
    4) Purely financial transactions.
    5) Subsidies from the government.

4. Which of the following would not affect the size of real GDP? (A/L 2013)
    1) A consumer purchases a new car for personal use.
    2) The government purchases a new bus for the defense academy.
    3) A consumer purchases a haircut from a hairdresser.
    4) **An investor purchases a rare renaissance painting at an auction.**
    5) A firm purchases a new power generator for its factory.

5. What are the limitations of GDP as a measure of people's living standards of an economy? (4 marks) (A/L 2018)
    - **Limitations of GDP as a measure of living standards: GDP is a measure of physical volume of goods and services produced within the country and it does not cover the qualitative changes (i.e. peaceful environment, freedom of expression, good governance, freedom of choice etc.) in the society which are relevant to the living standards of people.**
    - **GDP per capita may not correctly measure even the actual physical production of goods and services because of the prevalence of informal economic activities in many countries. Estimated GDP data could be an undervalued figure due to absence of correct information on the informal sector.**

- **GDP ignores distribution of income. GDP statistics mask income inequalities within countries.**
- **Gross domestic product and its related concepts (such as real GDP, per capita GDP and per capita real GDP) are incomplete measures of a country's standard of living. There are many productive activities that are not included in GDP. For example, do-it-yourself home production such as painting, house work and gardening are not included.**
- **Production in the unobserved economy (for example, the production of illegal drugs) is not included in GDP due to non-availability of accurate data.**
- **GDP does not consider how output contributes to the quality of people's lives. It simply measures how much output a country produces For example, people who live in urban areas spend a portion of their incomes on products to help them cope with urban problems For example, urban residents buy more alarm systems for their homes and cars, self-defense classes and stress medication.**
- **GDP does not measure the quality of the environment. A country might be able to increase its output (and GDP) if it eases pollution regulations. Yet, having higher per capita real GDP might not mean people have a better quality of life if the air, water and other resources are more polluted.**
- **GDP does not consider how leisure contributes to the quality of life. A country could increase its output (and GDP) if its people worked 12 hours per day, seven days per week. However, having more products might not mean people are better off if they have no leisure time to enjoy it.**
- **GDP counts "bads" as well as "goods". When an earthquake hits and requires rebuilding, GDP increases. When someone gets sick and money is spent on their care, it's counted as part of GDP. But nobody would argue that we're better off because of a destructive earthquake or people getting sick.**
- **GDP statistics fail to fully capture the benefits of technology. Think of a free app on your phone that you rely upon for traffic updates, directions, the weather, instantaneous information and so on. Because it's free, there's no way to use prices, our willingness to pay for the good as a measure of how much we value it.**

<u>National accounting</u>

6. Explain why an economy's total output in essence is also its total income. (2 marks)(A/L 2012)
   Production and income generation are two dimension of a same process. Incomes are generated due to production. National income is either the total sum of all income received within a particular period (income) or the total goods and services produced within a particular period (product).

   These two are similar in value. Households own all economic resources (land, labour, capital and entrepreneurship). Households sell their resources to firms and earn incomes. Firms use these resources to produce goods and services. Households are paid for the resources they provide. Therefore total value of the income should be compulsorily equal to the value of the production at factor price.

7. What are the three approaches in measuring aggregate economic activity of a country? Why do these three approaches give the same value for aggregate economic activity? (4 marks)(A/L 2015)
   - **Output (product) approach**
   - **Income approach**

- **Expenditure approach**

Output, income and expenditure approaches to measuring aggregate economic activities of the economy reflect three different dimensions of the same transaction.
Output approach measures the value of the final goods and services produced in the country within a given year.
Income approach measures the sum of all factor payments that were made to the factors who contributed to the production of all final goods and services. As the value of production should be equal to the total cost of the output, the value of total output and the value of total income are identical.
Similarly, under the expenditure approach, the value of aggregate economic activity is measured by summing all the spending on final goods and services that has taken place throughout the year.
Thus, we can determine the value of GDP for a particular year either by adding up all that was spent to buy total output or by adding up all the money that was derived as income from its production. Buying and selling are two aspects of the same transaction.

8. Explain how Gross Domestic product (GDP) is calculated using the three approaches and show how GDP at market prices is different form Net National Income. (4 marks)(A/L 2017)
Gross Domestic product (GDP) is the total market value of all final goods and services produced in the economy in one year. There are 3 approaches to calculate this value: production approach, income approach and expenditure approach.

Under the production approach, GDP is calculated by taking the sum of gross value added in all economic activities during an accounting period plus taxes less subsidies on products and production.
Income method measures the value of total output at market prices as the sum of all factor incomes generated by the process of production. This is the sum of all wages, interest, profits and rents, plus non-income charges of net indirect taxes and depreciation.
To calculate GDP from the expenditure approach, we must add up the expenditures needed to purchase all of the final output of the economy. Thus, the value of total output from the expenditure approach is the sum of consumption (C), investment (I), government purchases (G) and net exports (NX).

GDP at market prices differ from Net National Income (NNI) due to depreciation (consumption of fixed capital) and Net factor income from abroad.
NNI = GDP – Depreciation + Net factor income from abroad

9. In what ways are national income statistics useful? (4 marks)(A/L 2015)
   - **Monitoring the performance of the economy over time**
   - **To measure economic growth**
   - **International comparison of per capita income levels**
   - **Analysis of the structure of the economy**
   - **To assess standard of living and welfare of the people**
   - **Identifying the functional relationships between major macroeconomic variables**

- **Identifying the pattern of functional income distribution**
- **Social and economic policy making**
- **Identifying the total resources of the economy and their utilization**
- **Analysing and forecasting the behavior of the macroeconomic variables of the economy**

<u>Production boundary</u>

10. In national accounting, which one of the following activities is excluded from the production boundary? (A/L 2020)
    6) Services of unlicensed medical practitioners
    7) Services of owner-occupied dwellings
    8) Goods produced by households
    9) Provision of education free of charge by the government
    10) **<u>Caring for sick and old people by the members of the household</u>**

11. Why some productive activities are not measured and thus, are not included in (GDP)? Is this a serious problem in estimating the total output of a country? Explain your answer. (4 marks)(A/L 2012)
    Not all productive activity is included in GDP. For example, unpaid work (such as that performed in the home or by volunteers) and black market activities are not included because they are difficult to measure and value accurately.

    Non-market activities such as goods and services people produce for themselves are not included in GDP.
    Ex :- A baker who produces a loaf of bread for a customer would contribute to GDP, but would not contribute to GDP if he baked the same loaf for his family.

    Generally housewives are not included into labour force. Hence all the housework activities are not included in the GDP. Looking after the family and house, cleaning, cooking, washing, feeding and gardening are some activities that are not supplied through the market and housewives are not paid on these activities.

    Ideally all productive economic activities should be included in national accounting. However, due to practical and unavoidable difficulties above productive activities will be eliminated from national accounting. Seriousness of this problem is determined by the magnitude of the productive activities those are not included in GDP. In some economies it is as big as 30%.

12. What is the “underground economy”? How might its size be reduced? (4 marks)(A/L 2013)
    Underground economic activities are economic activities those are deliberately do not disclosed to avoid taxes and other regulatory requirements and illegal goods and services those are not recorded in national accounts are known as underground economic activities.
    Ex : -
    - **Under valuing goods when they are exported**

- **Under valuing real estate to reduce stamp duty**
- **Commission and bribes**
- **Smuggling**
- **Illicit liquor**
- **Prostitution and drug dealing**

Following are the ways those can reduce the size of underground economy,

- **Reduce taxes**
- **Making tax system more flexible and fair**
- **Allocate more resources to enforce law**
- **Strict the laws of the country and punish with severe penalties for the persons who are involved in such activities**
- **Strengthen good governance**

13. Which of the following are included in this year's GDP? Explain your answer in each case. (5 marks) (A/L 2012)
    (f) Interest received on corporate bonds
    Interest received on corporate bonds is included. This a payment on capital hence a productive transaction.

    (g) Pension payments received by a retired public servant
    Pension payments received is not included. It is a transfer payment.

    (h) The purchase of an insurance policy
    The purchase of an insurance policy is included. It is a productive service.

    (i) The purchase of 100 shares of a finance company
    The purchase of shares is not included.

    (j) Rent received on an apartment
    Rent received is included. This is a final service and hence is a productive transaction.

14. Explain whether the following transactions are included or not included in GDP of a country. (4 marks)(A/L 2016)
    (e) A tourist hotel purchases Rs. 10 million worth of foreign made canned food.
    Not included. Imported canned food is an item produced outside the geographical boundary of the country. Therefore, it is not a part of GDP of this country.

    (f) A soft drink manufacturing company builds a new bottling plant in the capital city.
    Included. Bottling plant is a capital good. It is included in GDP as a productive economic activity.

    (g) An investor buys Rs. 30 million worth of shares of a major commercial bank.

Not included. Investment in financial instruments are not considered as a productive economic transaction. Therefore, it is not included in GDP.

(h) A book publisher produces too many copies of a new book. The surplus copies that did not sell this year were added to the inventories.
Included. Accumulation of inventories is considered as investment. Therefore, it is included in GDP.

15. State whether the following items are included or excluded in the measurement of current year's GDP in a country and explain your answer in each case. (4 marks)(A/L 2018)

(e) A housewife grows vegetables in her home garden during the current year and the entire harvest is used for home consumption.
Included. All goods produced by households are within the production boundary.

(f) A retired worker receives a pension payment from the government.
Excluded. Retired worker is not in the current labour force and the productive value of his past service cannot be included in current year's GDP. Further, the pension payment is a transfer payment which does not represent a factor income. Therefore, it is not included either in GDP or GNI.

(g) A motor vehicle dealer earns a commission for selling a second-hand car.
Included. The commission earned by a second-hand car dealer represents a payment for a productive service - trade. Value addition in trade is counted in GDP.

(h) A mother helps her daughter to learn a lesson in mathematics at home.
Excluded. The production of services by members of the household for their own final consumption is excluded from measured production in national accounts.

16. State whether the following activities are included in the calculation of Sri Lanka's Gross Domestic Product and explain the reasons for your answer. (5 marks)(A/L 2020)

(f) An investor purchases Rs. 1 million of newly issued shares of a Sri Lankan company.
Not included in GDP. Share market transactions do not reflect value additions in production. It is a financial transaction.

(g) Construction of a new house worth of Rs. 50 million.
Included in GDP. It reflects a value addition in production.

(h) The purchase of Rs. 50 000 worth of fish by a restaurant in Colombo from a fisherman.
Not included in GDP. It is an intermediate input used in the production of restaurant service.

(i) Collection of Rs. 5 000 worth of bee honey by a farmer from a nearby forest.
Included in GDP. It is a productive activity within production boundary.

(j) A research project costing Rs. 10 million completed by an university research team on the economic

impact of Covid – 19.
Included in GDP. It is a productive activity within production boundary.

Output approach

17. The difference between Gross Value of Output (GVO) and Gross Value Added (GVA) is (A/L 2020)
    6) Consumption of fixed capital
    7) Intermediate consumption
    8) Net indirect taxes
    9) Net primary income
    10) Primary inputs

18. Which one of the following is a component of the Gross Value Added (GVA) at basic price? (A/L 2019)
    6) Intermediate consumption
    7) Changes in inventories
    8) Acquisition of valuables
    9) Taxes less subsidies on the product
    10) Other taxes less subsidies on production

19. Assume that a hypothetical economy contains only three industries. Industry A using imported inputs of Rs. 30 million to produce an output, sold for Rs. 100 million to industry B. Industry B, using no imports, sells part of its output to industry C for Rs. 300 million and exports goods to a foreign country for Rs. 60 million. Industry C uses Rs. 30 million of imported inputs and sells Rs. 500 millions of its output to final consumers. What is the Gross Domestic Product (GDP) of this economy? (A/L 2018)
    6) Rs. 440 million
    7) Rs. 500 million
    8) Rs. 900 million
    9) Rs. 960 million
    10) Rs. 990 million

20. What is value added? How is it calculated? (4 marks)(A/L 2016/2018)
    Value addition is difference between value of the final output and the value of the intermediate goods input used in making the final output.
    Value addition measures the contribution of each individual firm to the national output.
    When total value addition made by all producers (goods and services) is aggregated 'gross value addition' of the entire economy can be obtained. This approach can avoid double counting error.

    Method of calculating value addition
    At each stage of the manufacturing process, when input value is deducted from the output value, the value addition can be calculated.

    Value addition = Output value (Price X Quantity) – Input value (Intermediate consumption)

Expenditure approach

21. To calculate GDP from the expenditure side, one must add together (A/L 2015)

6) Wages, profits, government purchases and net exports.
7) Wages, rent, interest and profits.
8) Consumption, investment, government purchases and exports.
9) <u>Consumption, investment, government purchases and net exports.</u>
10) Consumption, government purchases, taxes and interest.

22. At present, the largest component of gross domestic capital formation in Sri Lanka is (A/L 2015)
    6) machinery and equipment
    7) financial assets
    8) land improvement and plantation development
    9) changes in stocks
    10) <u>construction</u>

23. Which of the following expenditures would be included in the calculation of gross fixed capital formation? (A/L 2017)
    6) <u>Buying a newly constructed house.</u>
    7) Buying a new luxury car.
    8) Buying 1000 shares of stock of a manufacturing company.
    9) Commission paid to a stock broker for selling stocks.
    10) Money spent on corn cultivation in a five hectare plot of land.
24. Which of the following household purchases will be counted as a component of gross private investment in estimating country's Gross Domestic Product using a expenditure approach? (A/L 2019)
    6) Sovereign bonds.
    7) Shares of a company.
    8) Debentures issued by an investment bank.
    9) A new car for personal use.
    10) <u>A newly constructed house</u>

25. In one year, total spending on consumption, investment and government purchases was equal to 103 percent of a country's Gross Domestic Product. This would be possible only if (A/L 2013)
    6) The money supply increased.
    7) Net exports were positive.
    8) <u>Net exports were negative.</u>
    9) The government ran a budget surplus.
    10) The government had a balance budget.

26. The national income data of a hypothetical economy is given below. (All figures are in Rupee million) (A/L 2014)

Private consumption expenditure	1200
Private investment expenditure	400
Government purchasing	300
Export earnings	180
Gross Domestic Product	1920

What is the value of trade balance in this economy?

6) Rs. –160 mn
7) Rs. –20 mn
8) <u>Rs. 20 mn</u>
9) Rs. 80 mn
10) Rs. 160 mn

27. Selected macroeconomic data for an economy is given below. (Figures are in Rs. Billion) (A/L 2012)

Government purchases	500
Wages and other supplementary labour incomes	2000
Depreciation	400
Gross investment	400
Private consumption	2200
Net Exports	– 50
Net indirect taxes	150

Net Domestic Product at market prices equals.

6) <u>Rs. 2650 billion</u>
7) Rs. 3050 billion
8) Rs. 3150 billion
9) Rs. 3400 billion
10) Rs. 4650 billion

28. Explain the following terms. (4 marks)(A/L 2018)

(c) Inventory investment

Inventory investments are additions to stocks of raw materials, semi-finished goods and finished goods held by the firm. The level of inventory investment by a firm will depend upon its forecasts about future demand and its resulting output plans. Inventory investment tends to be closely related to changes in production. Higher levels of output require more inventory investment in order to maintain the production process smoothly.

(d) Non-produced non-financial assets

In national accounts, non-financial non-produced assets consist of assets that have not been produced within the production boundary and that may be used in the production of goods and services. This is a component of Gross Domestic Capital Formation. Non-financial non-produced assets consists of natural resources (e.g. land, mineral and energy reserves, non-cultivated biological resources such as virgin forest, water resources, radio spectra and others), contracts, leases and licenses as well as goodwill and marketing assets.

29. What are the major components of Gross Fixed Capital Formation? (4 marks)(A/L 2017)

- **Buildings and structures**
- **Machinery and equipment**
- **Transport equipment**
- **Land improvement and plantation development**

<u>Alternative answer</u>

- **Dwellings**

- **Other buildings and structures**
- **Non-residential buildings**
- **Machinery and equipment**
- **Transport equipment**
- **Weapon system**
- **Cultivated biological assets**
- **Intellectual property products**
- **Non-produces non-monetary assets**

30. What do you mean by changes in inventory? Why are changes in inventories included as part of investment spending? (4 marks) (A/L 2013)

Changes in inventory is the change of value within the period of materials stocks, work-in-progress stocks and finished goods stocks (not yet distributed). In other words, changes in inventory refers to the change in the market value of these items at the end of the year and the beginning of the year.

GDP is designed to measure total current output. So, we must include in GDP any products which are produced but not sold this year. If GDP is to be an accurate measure of total production, it must include the market value of any additions to inventories which accrue during the year. Thereby, in the expenditure approach to GDP, changes in inventory is included as a component in investment spending

31. Which of the following items of government expenditure are 'collective' and which are 'individual'? (4 marks)(A/L 2019)

(e) Fertilizer subsidy **– Individual**
(f) Medical research **– Collective**
(g) Police and fire brigades **– Collective**
(h) School mid-day meal **– Individual**

32. "A country that spends more than its total national income must have a deficit in the trade balance." Comment on this statement. (4 marks)(A/L 2013)

National income is defined as,
Y = E
E = C + I + G + NX

If the spending on consumption (C), Investment (I) and State purchases (G) is higher than national income, Y < (C + I + G), then net exports (X – M) must be negative.
If net exports are negative that could mean a trade deficit.

33. What are the main sources of national savings in Sri Lanka? (4 marks)(A/L 2015)

- **Private savings**
  - **Households savings**
  - **Business savings**
- **Government/Public savings**

Domestic savings

- **Net factor income from abroad**
- **Net private current transfers from abroad**

Foreign savings

34. Assume you have been given the following data for a hypothetical economy. (4 marks)(A/L 2018)

Item	Value (Rs. Million)
Gross Domestic Fixed Capital Formation	800
Private Consumption Expenditure	3000
Net Primary Incomes from abroad	100
Government purchases	900
Changes in stocks	-50
Exports	450
Imports	600
Net Taxes on production	150

Calculate the GDP at market price.

GDP at market price (Expenditure approach)

GDP = C + I + C + X – M

GDP = 3000 + 800 + (– 50) + 900 + 450 – 600

GDP = Rs. 4500 million

35. You have been given the following data for a hypothetical economy. (4 marks)(A/L 2020)

Item	Value (Rs. Billion)
Aggregate consumption expenditure	10 000
Gross domestic capital formation	4 000
Export of goods and services	3 500
Import of goods and services	4 500
Net primary income from the rest of the world	– 400
Net current transfers from the rest of the world	1 000

Calculate the following based on the above data.

(c) Gross National Income

GDP = Aggregate consumption expenditure + Gross Domestic Capital Formation + (Export – Import)

GDP = 10 000 + 4 000 + (3 500 – 4 500)

GDP = Rs. 13 000 billion

GNI = GDP + Net primary income from the rest of the world

GNI = 13 000 + (– 400)

GNI = Rs. 12 600 billion

(d) Gross National Savings

Gross Domestic Savings = GDP – Aggregate Consumption Expenditure

Gross Domestic Savings = 13 000 – 10 000

Gross Domestic Savings = Rs. 3 000 billion

Gross National Savings = Gross Domestic Savings + Net primary income from the rest of the world – Net current transfers from the rest of the world

Gross National Savings = 3 000 + (– 400) + 1 000

Gross National Savings = <u>Rs. 3 600 billion</u>

36. The information pertaining to a hypothetical economy for a particular year is given below. (All figures are in Rs. Million) (12 marks)(A/L 2014)

Private consumption expenditure	800
Government Purchasing	150
Imports	60
Domestic private investment	200
Factor income from abroad	40
Change in inventories	50
Depreciations	40
Exports	80
Factor payment to abroad	60
Purchasing of raw materials	20
Purchasing of shares and bonds	15

For this economy,

(e) Construct aggregate demand equation

AD = E = Private consumption + Domestic investment + Government purchasing + Net exports

AD = E = C + I + G + (X – M)

(f) Calculate Gross Domestic Expenditure

GDE = C + I + G

GDE = 800 + 200 + 150

GDE = <u>Rs. 1150 million</u>

(g) Calculate Gross National Expenditure

GNE = GDE + Net exports + Net factor income from abroad

GNE = 1150 + (80 – 60) + (40 – 60)

GNE = <u>Rs. 1150 million</u>

(h) Calculate Net National Expenditure

NNE/NNP = GNE – Depreciation

NNE/NNP = 1150 – 40

NNE/NNP = <u>Rs. 1110 million</u>

37. Suppose you are given the following information about a hypothetical economy. (All figures are in Rs. Million) (8 marks)(A/L 2015)

Item	Value	Item	Value
Gross private domestic investment	70	Government transfers to households	25
Government purchases	50	Interest payments from the government to households	15
Gross Domestic product at market price	400	Factor income received from abroad	07
Current account balance of the balance of payments	-25	Factor payments made to abroad	12
Taxes	100	Net foreign current transfers	10

Calculate the following, using the above information.

(e) Net exports

Current account balance = Net exports + Net foreign factor income + Net foreign current transfers

Net exports = Current account balance – (Net foreign factor income + Net foreign current transfers)

Net exports = – 25 – [(7 – 12) + 10]

Net exports = Rs. – 30 million

(f) Private consumption expenditure

C = Y – (I + G + NX)

C = 400 – [70 + 50 + (– 30)]

C = Rs. – 310 million

(g) Disposable Gross National Income

GNDI = GNP + NFI (Net factor income from abroad) + Net foreign current transfers

GNDI = 400 + (– 5 + 10)

GNDI = Rs. 405 million

(h) Government savings

Sg = Net government revenue – Government purchases

Sg = [(T – Tr – (NT)] – G

Sg = (100 – 25 – 15) – 50

Sg = Rs. 10 million

Income approach

38. The main components of primary income are (A/L 2020)

6) **<u>compensation of employees, gross operating surplus and net taxes on production and imports.</u>**
7) compensation of employees, operating surplus and other net taxes on production.
8) compensation of employees, gross operating surplus and mixed incomes.
9) compensation of employees, operating surplus and consumption of fixed capital.
10) compensation of employees, gross operating surplus and other net taxes on production.

39. What is not included in the measurement of Gross National Income (GNI)? (A/L 2018)
    6) **<u>Financial benefits aid to the unemployed</u>**
    7) Dividends paid to shareholders
    8) Profits retained by companies
    9) Rent paid to landlords
    10) Property incomes paid to resource owners

40. Which of the following is considered a property income? (A/L 2019)
    6) Wages and salaries
    7) **<u>Interest</u>**
    8) Employers contribution to Employees Provident Fund
    9) Non-Life Insurance claims
    10) Subsidies
41. Which of the following is included in the calculation of personal income, but not in national income? (A/L 2016)
    6) Corporate dividends
    7) **<u>Transfer payments</u>**
    8) Social security contributions
    9) Undistributed corporate profits
    10) Net interest

42. If personal income exceeded national income in a particular year, it can be concluded that (A/L 2020)
    6) **<u>the amount of transfer payments exceeded the sum of social security contributions, corporate income taxes and undistributed corporate profits.</u>**
    7) the sum of social security contributions, corporate income taxes and undistributed corporate profits exceeded transfer payments.
    8) the sum of social security contributions and corporate income taxes exceeded indirect taxes.
    9) the amount of transfer payments exceeded the sum social security contributions, corporate income taxes and indirect taxes.
    10) the sum of corporate income taxes and indirect taxes exceeded the sum of transfer payments and undistributed profits.

43. What are the major components of aggregate income? (4 marks)(A/L 2016)
    - **Compensation of employees**

- **Rents**
- **Net interest**
- **Corporate profits**
- **Income from unincorporated businesses**

44. Why are interest payments by the government considered part of personal income but not part of national income? (4 marks)(A/L 2013)

Interest payments on government debt are considered as transfer payments for the purpose of national accounting. GDP consists only spending on goods and services and excludes transfer payments.

Interest payment is a return on debt incurred to pay for past government programmes and it is not a payment made for purchasing current years government goods and services. So, the interests are excluded from GDP calculations. However, interest income received from the government are included in the computation of personal income.

45. Consider the data given below for a hypothetical economy. (Figures are in Rs. Billion) (5 marks)(A/L 2012)

Item	Value	Item	Value
Wages, salaries and other labour incomes	255	Net exports	11
Indirect taxes	25	Depreciation	40
Interest incomes	55	Subsidies	20
Undistributed corporate profits	72	Corporate income tax	18
Property incomes	34	Dividends	16
Incomes of self-employed	80	Net foreign factor incomes	5

Using the above data, determine GNP at market price.

<u>**Calculation of GNP at market price**</u>		**(Rs. Billion)**
Wages, salaries and other labour incomes	=	**225**
Interest incomes	=	**55**
Corporate profits (72+18+16)	=	**106**
Property incomes	=	**34**
Incomes of self-employed	=	**80**
Net foreign factor incomes	=	**05**
Depreciation	=	**40**
Net indirect taxes (25-20)	=	**05**
GNP at market price	=	<u>**Rs. 550 billion**</u>

46. You have been given the following data for a hypothetical economy. (8 marks)(A/L 2019)

Item	Value (Rs. Billion)

Compensation of employees	2500
Gross operating surplus	6000
Consumption of fixed capital	700
Other taxes less subsidies on production	50
Taxes on products	1200
Subsidies on products	250
Net primary income from the rest of the world	– 400
Net current transfers from the rest of the world	1000

Calculate the following based on the above data.

(e) Gross Value Added at basic price

Compensation of employees	**=**	**2500**
Gross operating surplus	**=**	**6000**
Other taxes less subsidies on production	**=**	**50**
GVA at basic price	**=**	**Rs. 8550 billion**

(f) Gross Domestic Product

GDP = GVA at basic price + Taxes less subsidies on products

GDP = 8550 + (1200 – 250)

GDP = Rs. 9500 billion

(g) Net National Income

NNI = GDP – Consumption of fixed capital + Net Primary Income from rest of the world

NNI = 9500 – 700 + (– 400)

NNI = Rs. 8400 billion

(h) Gross National Disposable Income

GNDI = GDP + Net Primary income from the rest of the world + Net Current Transfers from the rest of

the

world

GNDI = 9500 + (– 400) + 1000

GNDI = Rs. 10 100 billion