Microeconomics

A) Competitive markets: Demand and supply

1) Markets
   (a) The nature of markets
       • Outline the meaning of the term market.

2) Demand
   (a) The law of demand
       • Explain the negative causal relationship between price and quantity demanded.
       • Describe the relationship between an individual consumer’s demand and market demand.
   (b) The demand curve
       • Explain that a demand curve represents the relationship between the price and the quantity demanded of a product, ceteris paribus.
       • Draw a demand curve.
   (c) The non-price determinants of demand (factors that change demand or shift the demand curve)
       • Explain how factors including changes in income (in the cases of normal and inferior goods), preferences, prices of related goods (in the cases of substitutes and complements) and demographic changes may change demand.
   (d) Movements along and shifts of the demand curve
       • Distinguish between movements along the demand curve and shifts of the demand curve.
       • Draw diagrams to show the difference between movements along the demand curve and shifts of the demand curve.

3) Supply
   (a) The law of supply
       • Explain the positive causal relationship between price and quantity supplied.
       • Describe the relationship between an individual producer’s supply and market supply.

4) The supply curve
   • Explain that a supply curve represents the relationship between the price and the quantity supplied of a product, ceteris paribus.
   • Draw a supply curve.
   (b) The non-price determinants of supply (factors that change supply or shift the supply curve)
       • Explain how factors including changes in costs of factors of production (land, labor, capital and entrepreneurship), technology, prices of related goods (joint/competitive supply), expectations, indirect taxes and subsidies and the number of firms in the market can change supply.
   (c) Movements along and shifts of the supply curve
       • Distinguish between movements along the supply curve and shifts of the supply curve.
       • Construct diagrams to show the difference between movements along the supply curve and shifts

5) Market equilibrium
   (a) Equilibrium and changes to equilibrium
       • Explain, using diagrams, how demand and supply interact to produce market equilibrium.
       • Analyze, using diagrams and with reference to excess demand or excess supply, how changes in the determinants of demand and/or supply result in a new market equilibrium.
6) **The role of the price mechanism**

(a) **Resource allocation**
   - Explain why scarcity necessitates choices that answer the “What to produce?” question.
   - Explain why choice results in an opportunity cost.
   - Explain, using diagrams, that price has a signalling function and an incentive function, which result in a reallocation of resources when prices change as a result of a change in demand or supply conditions.

7) **Market efficiency**

(a) **Consumer surplus**
   - Explain the concept of consumer surplus.
   - Identify consumer surplus on a demand and supply diagram.

(b) **Producer surplus**
   - Explain the concept of producer surplus.
   - Identify producer surplus on a demand and supply diagram.

(c) **Allocative efficiency**
   - Explain that the best allocation of resources from society’s point of view is at competitive market equilibrium, where social (community) surplus (consumer surplus and producer surplus) is maximized (marginal benefit = marginal cost)

B) **Elasticity**

1) **Price elasticity of demand (PED)**

(a) **Price elasticity of demand and its determinants**
   - Explain the concept of price elasticity of demand, understanding that it involves responsiveness of quantity demanded to a change in price, along a given demand curve.
   - Calculate PED using the following equation—
     \[
     PED = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in price}}
     \]
   - State that the PED value is treated as if it were positive although its mathematical value is usually negative.
   - Explain, using diagrams and PED values, the concepts of price elastic demand, price inelastic demand, unit elastic demand, perfectly elastic demand and perfectly inelastic demand.
   - Explain the determinants of PED, including the number and closeness of substitutes, the degree of necessity, time and the proportion of income spent on the good.
   - Calculate PED between two designated points on a demand curve using the PED equation above.
   - Explain why PED varies along a straight line demand curve and is not represented by the slope of the demand curve.

(b) **Applications of price elasticity of demand**
   - Examine the role of PED for firms in making decisions regarding price changes and their effect on total revenue.
   - Explain why the PED for many primary commodities is relatively low and the PED for manufactured products is relatively high.
   - Examine the significance of PED for government in relation to indirect taxes.
2) **Cross price elasticity of demand (XED)**
   (a) Cross price elasticity of demand and its determinants
      • Outline the concept of cross price elasticity of demand, understanding that it involves
        responsiveness of demand for one good (and hence a shifting demand curve) to a change
        in the price of another good.
      • Calculate XED using the following equation—
        \[ XED = \frac{\% \text{ change in quantity demanded of good } x}{\% \text{ change in price of good } y} \]
      • Show that substitute goods have a positive value of XED and complementary goods have
        a negative value of XED.
      • Explain that the (absolute) value of XED depends on the closeness of the relationship
        between two goods.
   (b) Applications of cross price elasticity of demand
      • Examine the implications of XED for businesses if prices of substitutes or complements
        change.

3) **Income elasticity of demand (YED)**
   (a) Income elasticity of demand and its determinants
      • Outline the concept of income elasticity of demand, understanding that it involves
        responsiveness of demand (and hence a shifting demand curve) to a change in income.
      • Calculate YED using the following equation—
        \[ YED = \frac{\% \text{ change in quantity demanded}}{\% \text{ change in income}} \]
      • Show that normal goods have a positive value of YED and inferior goods have a negative
        value of YED.
      • Distinguish, with reference to YED, between necessity (income inelastic) goods and luxury
        (income elastic) goods.
   (b) Applications of income elasticity of demand
      • Examine the implications for producers and for the economy of a relatively low YED for
        primary products, a relatively higher YED for manufactured products and an even higher
        YED for services.

4) **Price elasticity of supply (PES)**
   (a) Price elasticity of supply and its determinants
      • Explain the concept of price elasticity of supply, understanding that it involves
        responsiveness of quantity supplied to a change in price along a given supply curve.
      • Calculate PES using the following equation—
        \[ PES = \frac{\% \text{ change in quantity supplied}}{\% \text{ change in price}} \]
      • Explain, using diagrams and PES values, the concepts of elastic supply, inelastic supply,
        unit elastic supply, perfectly elastic supply and perfectly inelastic supply.
      • Explain the determinants of PES, including time, mobility of factors of production, unused
        capacity and ability to store stocks.
   (b) Applications of price elasticity of supply
      • Explain why the PES for primary commodities is relatively low and the PES for
        manufactured products is relatively high.
C) **Government Intervention**

1) **Indirect taxes**
   - (a) Specific (fixed amount) taxes and ad valorem (percentage) taxes and their impact on markets
     - Explain why governments impose indirect (excise) taxes.
     - Distinguish between specific and ad valorem taxes.
     - Draw diagrams to show specific and ad valorem taxes, and analyze their impacts on market outcomes.
     - Discuss the consequences of imposing an indirect tax on the stakeholders in a market, including consumers, producers and the government.

2) **Subsidies**
   - (a) Impact on markets
     - Explain why governments provide subsidies, and describe examples of subsidies.
     - Draw a diagram to show a subsidy, and analyze the impacts of a subsidy on market outcomes.
     - Discuss the consequences of providing a subsidy on the stakeholders in a market, including consumers, producers and the government.

3) **Price controls**
   - (a) Price ceilings (maximum prices): rationale, consequences and examples
     - Explain why governments impose price ceilings, and describe examples of price ceilings, including food price controls and rent controls.
     - Draw a diagram to show a price ceiling, and analyze the impacts of a price ceiling on market outcomes.
     - Examine the possible consequences of a price ceiling, including shortages, inefficient resource allocation, welfare impacts, underground parallel markets and non-price rationing mechanisms.
     - Discuss the consequences of imposing a price ceiling on the stakeholders in a market, including consumers, producers and the government.
   - (b) Price floors (minimum prices): rationale, consequences and examples
     - Explain why governments impose price floors, and describe examples of price floors, including price support for agricultural products and minimum wages.
     - Draw a diagram of a price floor, and analyze the impacts of a price floor on market outcomes.
     - Examine the possible consequences of a price floor, including surpluses and government measures to dispose of the surpluses, inefficient resource allocation and welfare impacts.
     - Discuss the consequences of imposing a price floor on the stakeholders in a market, including consumers, producers and the government.

D) **Market Failure**

1) **The meaning of market failure**
   - (a) Market failure as a failure to allocate resources efficiently
     - Analyze the concept of market failure as a failure of the market to achieve allocative efficiency, resulting in an overallocation of resources (overprovision of a good) or an under-allocation of resources (under-provision of a good)
2) **Types of market failure**

(a) The meaning of externalities
- Describe the concepts of marginal private benefits (MPB), marginal social benefits (MSB), marginal private costs (MPC) and marginal social costs (MSC).
- Describe the meaning of externalities as the failure of the market to achieve a social optimum where MSB = MSC.

(b) Negative externalities of production and consumption
- Explain, using diagrams and examples, the concepts of negative externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service.
- Explain that demerit goods are goods whose consumption creates external costs.
- Evaluate, using diagrams, the use of policy responses, including market-based policies (taxation and tradable permits), and government regulations, to the problem of negative externalities of production and consumption.

(c) Positive externalities of production and consumption
- Explain, using diagrams and examples, the concepts of positive externalities of production and consumption, and the welfare loss associated with the production or consumption of a good or service.
- Explain that merit goods are goods whose consumption creates external benefits.
- Evaluate, using diagrams, the use of government responses, including subsidies, legislation, advertising to influence behaviour, and direct provision of goods and services.

(d) Lack of public goods
- Using the concepts of rivalry and excludability, and providing examples, distinguish between public goods (non-rivalrous and nonexcludable) and private goods (rivalrous and excludable).
- Explain, with reference to the free rider problem, how the lack of public goods indicates market failure.
- Discuss the implications of the direct provision of public goods by government.

(e) Common access resources and the threat to sustainability
- Describe, using examples, common access resources.
- Describe sustainability.
- Explain that the lack of a pricing mechanism for common access resource means that these goods may be overused/depleted/degraded as a result of activities of producers and consumers who do not pay for the resources that they use, and that this poses a threat to sustainability.
- Explain, using negative externalities diagrams, that economic activity requiring the use of fossil fuels to satisfy demand poses a threat to sustainability.
- Explain that the existence of poverty in economically less developed countries creates negative externalities through over-exploitation of land for agriculture, and that this poses a threat to sustainability.
- Evaluate, using diagrams, possible government responses to threats to sustainability, including legislation, carbon taxes, cap and trade schemes, and funding for clean technologies.
- Explain, using examples, that government responses to threats to sustainability are limited by the global nature of the problems and the lack of ownership of common access resources, and that effective responses require international cooperation.
**Macroeconomics**

E) **Level of Overall Economic Activity**

1) **Economic activity**

   (a) The circular flow of income model

   • Describe, using a diagram, the circular flow of income between households and firms in a closed economy with no government.
   • Identify the four factors of production and their respective payments (rent, wages, interest and profit) and explain that these constitute the income flow in the model.
   • Outline that the income flow is numerically equivalent to the expenditure flow and the value of output flow.
   • Describe, using a diagram, the circular flow of income in an open economy with government and financial markets, referring to leakages withdrawals (savings, taxes and import expenditure) and injections (investment, government expenditure and export revenue).
   • Explain how the size of the circular flow will change depending on the relative size of injections and leakages.

   (b) Measures of economic activity: gross domestic product (GDP), and gross national product (GNP) or gross national income (GNI)

   • Distinguish between GDP and GNP/GNI as measures of economic activity.
   • Distinguish between the nominal value of GDP and GNP/GNI and the real value of GDP and GNP/GNI.
   • Distinguish between total GDP and GNP/GNI and per capita GDP and GNP/GNI.
   • Examine the output approach, the income approach and the expenditure approach when measuring national income.
   • Evaluate the use of national income statistics, including their use for making comparisons over time, their use for making comparisons between countries and their use for making conclusions about standards of living.
   • Explain the meaning and significance of “green GDP”, a measure of GDP that accounts for environmental destruction

2) **The business cycle**

   (a) Short-term fluctuations and long-term trend

   • Explain, using a business cycle diagram, that economies typically tend to go through a cyclical pattern characterized by the phases of the business cycle.
   • Explain the long-term growth trend in the business cycle diagram as the potential output of the economy.
   • Distinguish between a decrease in GDP and a decrease in GDP growth.
F) **Aggregate Demand & Aggregate Supply**

1) **Aggregate demand (AD)**
   
   (a) The AD curve
   - Distinguish between the microeconomic concept of demand for a product and the macroeconomic concept of aggregate demand.
   - Construct an aggregate demand curve. • Explain why the AD curve has a negative slope.
   
   (b) The components of AD
   - Describe consumption, investment, government spending and net exports as the components of aggregate demand.
   
   (c) The determinants of AD or causes of shifts in the AD curve
   - Explain how the AD curve can be shifted by changes in consumption due to factors including changes in consumer confidence, interest rates, wealth, personal income taxes (and hence disposable income) and level of household indebtedness.
   - Explain how the AD curve can be shifted by changes in investment due to factors including interest rates, business confidence, technology, business taxes and the level of corporate indebtedness. • Explain how the AD curve can be shifted by changes in government spending due to factors including political and economic priorities.
   - Explain how the AD curve can be shifted by changes in net exports due to factors including the income of trading partners, exchange rates and changes in the level of protectionism.

2) **Aggregate supply (AS)**
   
   (a) The meaning of aggregate supply
   - Describe the term aggregate supply.
   - Explain, using a diagram, why the short-run aggregate supply curve (SRAS curve) is upward sloping.
   - Explain, using a diagram, how the AS curve in the short run (SRAS) can shift due to factors including changes in resource prices, changes in business taxes and subsidies and supply shocks.

   (b) Alternative views of aggregate supply
   - Explain, using a diagram, that the monetarist/new classical model of the longrun aggregate supply curve (LRAS) is vertical at the level of potential output (full employment output) because aggregate supply in the long run is independent of the price level.
   - Explain, using a diagram, that the Keynesian model of the aggregate supply curve has three sections because of “wage/price” downward inflexibility and different levels of spare capacity in the economy.

   (c) Shifting the aggregate supply curve over the long term
   - Explain, using the two models above, how factors leading to changes in the quantity and/or quality of factors of production (including improvements in efficiency, new technology, reductions in unemployment, and institutional changes) can shift the aggregate supply curve over the long term.
3) **Equilibrium**
   (a) **Short-run equilibrium**
   • Explain, using a diagram, the determination of short-run equilibrium, using the SRAS curve.
   • Examine, using diagrams, the impacts of changes in short-run equilibrium.
   (b) **Equilibrium in the monetarist/new classical model**
   • Explain, using a diagram, the determination of long-run equilibrium, indicating that long-run equilibrium occurs at the full employment level of output.
   • Explain why, in the monetarist/new classical approach, while there may be short-term fluctuations in output, the economy will always return to the full employment level of output in the long run.
   • Examine, using diagrams, the impacts of changes in the long-run equilibrium. **Equilibrium in the Keynesian model**
   • Explain, using the Keynesian AD/AS diagram, that the economy may be in equilibrium at any level of real output where AD intersects AS.
   • Explain, using a diagram, that if the economy is in equilibrium at a level of real output below the full employment level of output, then there is a deflationary (recessionary) gap.
   • Discuss why, in contrast to the monetarist/new classical model, the economy can remain stuck in a deflationary (recessionary) gap in the Keynesian model.
   • Explain, using a diagram, that if AD increases in the vertical section of the AS curve, then there is an inflationary gap.
   • Discuss why, in contrast to the monetarist/new classical model, increases in aggregate demand in the Keynesian AD/AS model need not be inflationary, unless the economy is operating close to, or at, the level of full employment.
G) **Macroeconomic Objectives**

1) **Low unemployment**
   
   (a) The meaning of unemployment
   
   - Define the term unemployment.
   - Explain how the unemployment rate is calculated.
   - Explain the difficulties in measuring unemployment, including the existence of hidden unemployment, the existence of underemployment, and the fact that it is an average and therefore ignores regional, ethnic, age and gender disparities.

   (b) Consequences of unemployment
   
   - Discuss possible economic consequences of unemployment, including a loss of GDP, loss of tax revenue, increased cost of unemployment benefits, loss of income for individuals, and greater disparities in the distribution of income.
   - Discuss possible personal and social consequences of unemployment, including increased crime rates, increased stress levels, increased indebtedness, homelessness and family breakdown.

   (c) Types and causes of unemployment
   
   - Describe, using examples, the meaning of frictional, structural, seasonal and cyclical (demand-deficient) unemployment.
   - Distinguish between the causes of frictional, structural, seasonal and cyclical (demand-deficient) unemployment.
   - Explain, using a diagram, that cyclical unemployment is caused by a fall in aggregate demand.
   - Explain, using a diagram, that structural unemployment is caused by changes in the demand for particular labor skills, changes in the geographical location of industries, and labor market rigidities.
   - Evaluate government policies to deal with the different types of unemployment.

2) **Low and stable rate of inflation**

   (a) The meaning of inflation, disinflation and deflation
   
   - Distinguish between inflation, disinflation and deflation.
   - Explain that inflation and deflation are typically measured by calculating a consumer price index (CPI), which measures the change in prices of a basket of goods and services consumed by the average household.
   - Explain that different income earners may experience a different rate of inflation when their pattern of consumption is not accurately reflected by the CPI.
   - Explain that inflation figures may not accurately reflect changes in consumption patterns and the quality of the products purchased.
   - Explain that economists measure a core/underlying rate of inflation to eliminate the effect of sudden swings in the prices of food and oil, for example.
   - Explain that a producer price index measuring changes in the prices of factors of production may be useful in predicting future inflation.

   (b) Consequences of inflation
   
   - Discuss the possible consequences of a high inflation rate, including greater uncertainty, redistributive effects, less saving, and the damage to export competitiveness.

   (c) Consequences of deflation
   
   - Discuss the possible consequences of deflation, including high levels of cyclical unemployment and bankruptcies.
(d) Types and causes of inflation
   • Explain, using a diagram, that demand-pull inflation is caused by changes in the
determinants of AD, resulting in an increase in AD.
   • Explain, using a diagram, that cost-push inflation is caused by an increase in the costs of
factors of production, resulting in a decrease in SRAS.
   • Evaluate government policies to deal with the different types of inflation.

3) Economic growth
   (a) The meaning of economic growth
   • Define economic growth as an increase in real GDP.

   (b) Causes of economic growth
   • Describe, using a production possibilities curve (PPC) diagram, economic growth as an
increase in actual output caused by factors including a reduction in unemployment and
increases in productive efficiency, leading to a movement of a point inside the PPC to a
point closer to the PPC.
   • Describe, using a PPC diagram, economic growth as an increase in production possibilities
caused by factors including increases in the quantity and quality of resources, leading to
outward PPC shifts.
   • Describe, using an LRAS diagram, economic growth as an increase in potential output
caused by factors including increases in the quantity and quality of resources, leading to a
rightward shift of the LRAS curve.
   • Explain the importance of investment for economic growth, referring to investment in
physical capital, human capital and natural capital.
   • Explain the importance of improved productivity for economic growth.

   (c) Consequences of economic growth
   • Discuss the possible consequences of economic growth, including the possible impacts on
living standards, unemployment, inflation, the distribution of income, the current account of
the balance of payments, and sustainability.
4) **Equity in the distribution of income**

   (a) The meaning of equity in the distribution of income
   - Explain the difference between equity in the distribution of income and equality in the
distribution of income.
   - Explain that due to unequal ownership of factors of production, the market system may not
result in an equitable distribution of income.

   (b) Indicators of income equality/inequality
   - Analyze data on relative income shares of given percentages of the population, including
deciles and quintiles.
   - Draw a Lorenz curve and explain its significance.
   - Explain how the Gini coefficient is derived and interpreted.

   (c) Poverty
   - Distinguish between absolute poverty and relative poverty.
   - Explain possible causes of poverty, including low incomes, unemployment and lack of
human capital.
   - Explain possible consequences of poverty, including low living standards, and lack of
access to health care and education.

   (d) The role of taxation in promoting equity
   - Distinguish between direct and indirect taxes, providing examples of each, and explain that
direct taxes may be used as a mechanism to redistribute income.
   - Distinguish between progressive, regressive and proportional taxation, providing examples
of each.

   (e) Other measures to promote equity
   - Explain that governments undertake expenditures to provide directly, or to subsidize, a
variety of socially desirable goods and services (including health care services, education,
and infrastructure that includes sanitation and clean water supplies), thereby making them
available to those on low incomes.
   - Explain the term transfer payments, and provide examples, including old age pensions,
unemployment benefits and child allowances.

   (f) The relationship between equity and efficiency
   - Evaluate government policies to promote equity (taxation, government expenditure and
transfer payments) in terms of their potential positive or negative effects on efficiency in the
allocation of resources.
H) **Fiscal Policy**

1) **The government budget**
   (a) Sources of government revenue
      • Explain that the government earns revenue primarily from taxes (direct and indirect), as well as from the sale of goods and services and the sale of state-owned (government-owned) enterprises.
   (b) Types of government expenditures
      • Explain that government spending can be classified into current expenditures, capital expenditures and transfer payments, providing examples of each.
   (c) The budget outcome
      • Distinguish between a budget deficit, a budget surplus and a balanced budget.
      • Explain the relationship between budget deficits/surpluses and the public (government) debt.

2) **The role of fiscal policy**
   (a) Fiscal policy and short-term demand management
      • Explain how changes in the level of government expenditure and/or taxes can influence the level of aggregate demand in an economy.
      • Describe the mechanism through which expansionary fiscal policy can help an economy close a deflationary (recessionary) gap.
      • Construct a diagram to show the potential effects of expansionary fiscal policy, outlining the importance of the shape of the aggregate supply curve.
      • Describe the mechanism through which contractionary fiscal policy can help an economy close an inflationary gap.
      • Construct a diagram to show the potential effects of contractionary fiscal policy, outlining the importance of the shape of the aggregate supply curve.
   (b) The impact of automatic stabilizers
      • Explain how factors including the progressive tax system and unemployment benefits, which are influenced by the level of economic activity and national income, automatically help stabilize short-term fluctuations.
   (c) Fiscal policy and its impact on potential output
      • Explain that fiscal policy can be used to promote long-term economic growth (increases in potential output) indirectly by creating an economic environment that is favourable to private investment, and directly through government spending on physical capital goods and human capital formation, as well as provision of incentives for firms to invest.
   (d) Evaluation of fiscal policy
      • Evaluate the effectiveness of fiscal policy through consideration of factors including the ability to target sectors of the economy, the direct impact on aggregate demand, the effectiveness of promoting economic activity in a recession, time lags, political constraints, crowding out, and the inability to deal with supply-side causes of instability.
I) **Monetary Policy**

1) **Interest rates**
   
   (a) Interest rate determination and the role of a central bank
   
   • Describe the role of central banks as regulators of commercial banks and bankers to governments.
   
   • Explain that central banks are usually made responsible for interest rates and exchange rates in order to achieve macroeconomic objectives.
   
   • Explain, using a demand and supply of money diagram, how equilibrium interest rates are determined, outlining the role of the central bank in influencing the supply of money.

2) **The role of monetary policy**
   
   (a) Monetary policy and short-term demand management
   
   • Explain how changes in interest rates can influence the level of aggregate demand in an economy.
   
   • Describe the mechanism through which easy (expansionary) monetary policy can help an economy close a deflationary (recessionary) gap.
   
   • Construct a diagram to show the potential effects of easy (expansionary) monetary policy, outlining the importance of the shape of the aggregate supply curve.
   
   • Describe the mechanism through which tight (contractionary) monetary policy can help an economy close an inflationary gap.
   
   • Construct a diagram to show the potential effects of tight (contractionary) monetary policy, outlining the importance of the shape of the aggregate supply curve.

   (b) Monetary policy and inflation targeting
   
   • Explain that central banks of certain countries, rather than focusing on the maintenance of both full employment and a low rate of inflation, are guided in their monetary policy by the objective to achieve an explicit or implicit inflation rate target.

   (c) Evaluation of monetary policy
   
   • Evaluate the effectiveness of monetary policy through consideration of factors including the independence of the central bank, the ability to adjust interest rates incrementally, the ability to implement changes in interest rates relatively quickly, time lags, limited effectiveness in increasing aggregate demand if the economy is in deep recession and conflict among government economic objectives.

J) **Supply-Side Policies**

1) **The role of supply-side policies**
   
   (a) Supply-side policies and the economy
   
   • Explain that supply-side policies aim at positively affecting the production side of an economy by improving the institutional framework and the capacity to produce (that is, by changing the quantity and/or quality of factors of production).
   
   • State that supply-side policies may be market-based or interventionist, and that in either case they aim to shift the LRAS curve to the right, achieving growth in potential output.
2) **Interventionist supply-side policies**
   (a) Investment in human capital
       • Explain how investment in education and training will raise the levels of human capital and have a short-term impact on aggregate demand, but more importantly will increase LRAS.
   (b) Investment in new technology
       • Explain how policies that encourage research and development will have a short-term impact on aggregate demand, but more importantly will result in new technologies and will increase LRAS.
   (c) Investment in infrastructure
       • Explain how increased and improved infrastructure will have a short-term impact on aggregate demand, but more importantly will increase LRAS.
   (d) Industrial policies
       • Explain that targeting specific industries through policies including tax cuts, tax allowances and subsidized lending promotes growth in key areas of the economy and will have a short-term impact on aggregate demand but, more importantly, will increase LRAS.

3) **Market-based supply-side policies**
   (a) Policies to encourage competition
       • Explain how factors including deregulation, privatization, trade liberalization and antimonopoly regulation are used to encourage competition.
   (b) Labor market reforms
       • Explain how factors including reducing the power of labor unions, reducing unemployment benefits and abolishing minimum wages are used to make the labor market more flexible (more responsive to supply and demand).
   (c) Incentive-related policies
       • Explain how factors including personal income tax cuts are used to increase the incentive to work, and how cuts in business tax and capital gains tax are used to increase the incentive to invest.

4) **Evaluation of supply-side policies**
   (a) The strengths and weaknesses of supply-side policies
       • Evaluate the effectiveness of supply-side policies through consideration of factors including time lags, the ability to create employment, the ability to reduce inflationary pressure, the impact on economic growth, the impact on the government budget, the effect on equity, and the effect on the environment.
International Economics
A) International trade
  1) Free trade
     (a) The benefits of trade
        • Explain that gains from trade include lower prices for consumers, greater choice for
          consumers, the ability of producers to benefit from economies of scale, the ability to acquire
          needed resources, a more efficient allocation of resources, increased competition, and a
          source of foreign exchange.
     (b) The World Trade Organization (WTO)
        • Describe the objectives and functions of the WTO.
  2) Restrictions on free trade: Trade protection
     (a) Types of trade protection
        • Explain, using a tariff diagram, the effects of imposing a tariff on imported goods on
          different stakeholders, including domestic producers, foreign producers, consumers and the
          government.
        • Explain, using a diagram, the effects of setting a quota on foreign producers on different
          stakeholders, including domestic producers, foreign producers, consumers and the
          government.
        • Explain, using a diagram, the effects of giving a subsidy to domestic producers on different
          stakeholders, including domestic producers, foreign producers, consumers and the
          government.
        • Describe administrative barriers that may be used as a means of protection.
        • Evaluate the effect of different types of trade protection.
     (b) Arguments for and against trade protection (arguments against and for free trade)
        • Discuss the arguments in favour of trade protection, including the protection of domestic
          jobs, national security, protection of infant industries, the maintenance of health, safety and
          environmental standards, anti-dumping and unfair competition, a means of overcoming a
          balance of payments deficit and a source of government revenue.
        • Discuss the arguments against trade protection, including a misallocation of resources, the
          danger of retaliation and “trade wars”, the potential for corruption, increased costs of
          production due to lack of competition, higher prices for domestic consumers, increased
          costs of imported factors of production and reduced export competitiveness.
B) **Exchange rates**

1) **Freely floating exchange rates**
   
   (a) Determination of freely floating exchange rates
   
   - Explain that the value of an exchange rate in a floating system is determined by the demand for, and supply of, a currency.
   - Draw a diagram to show determination of exchange rates in a floating exchange rate system.

   (b) Causes of changes in the exchange rate
   
   - Describe the factors that lead to changes in currency demand and supply, including foreign demand for a country’s exports, domestic demand for imports, relative interest rates, relative inflation rates, investment from overseas in a country’s firms (foreign direct investment and portfolio investment) and speculation.
   - Distinguish between a depreciation of the currency and an appreciation of the currency.
   - Draw diagrams to show changes in the demand for, and supply of, a currency.

   (c) The effects of exchange rate changes
   
   - Evaluate the possible economic consequences of a change in the value of a currency, including the effects on a country’s inflation rate, employment, economic growth and current account balance.

C) **Government intervention**

   (a) Fixed exchange rates
   
   - Describe a fixed exchange rate system involving commitment to a single fixed rate.
   - Distinguish between a devaluation of a currency and a revaluation of a currency.
   - Explain, using a diagram, how a fixed exchange rate is maintained.

   (b) Managed exchange rates (managed float)
   
   - Explain how a managed exchange rate operates, with reference to the fact that there is a periodic government intervention to influence the value of an exchange rate.
   - Examine the possible consequences of overvalued and undervalued currencies.

   (c) Evaluation of different exchange rate systems
   
   - Compare and contrast a fixed exchange rate system with a floating exchange rate system, with reference to factors including the degree of certainty for stakeholders, ease of adjustment, the role of international reserves in the form of foreign currencies and flexibility offered to policy makers.
D) **The balance of payments**

1) **The structure of the balance of payments**
   
   (a) The meaning of the balance of payments
   
   • Outline the role of the balance of payments.
   
   • Distinguish between debit items and credit items in the balance of payments.

   (b) The components of the balance of payments accounts
   
   • Explain the four components of the current account, specifically the balance of trade in goods, the balance of trade in services, income and current transfers.
   
   • Distinguish between a current account deficit and a current account surplus.
   
   • Explain the two components of the capital account, specifically capital transfers and transaction in nonproduced, non-financial assets.
   
   • Explain the three main components of the financial account, specifically, direct investment, portfolio investment and reserve assets.

   (c) The relationships between the accounts
   
   • Explain that the current account balance is equal to the sum of the capital account and financial account balances.
   
   • Examine how the current account and the financial account are interdependent.

2) **Current account deficits**

   (a) The relationship between the current account and the exchange rate
   
   • Explain why a deficit in the current account of the balance of payments may result in downward pressure on the exchange rate of the currency.

3) **Current account surpluses**

   (a) The relationship between the current account and the exchange rate
   
   • Explain why a surplus in the current account of the balance of payments may result in upward pressure on the exchange rate of the currency.

E) **Economic integration**

1) **Forms of economic integration**

   (a) Preferential trade agreements
   
   • Distinguish between bilateral and multilateral (WTO) trade agreements.
   
   • Explain that preferential trade agreements give preferential access to certain products from certain countries by reducing or eliminating tariffs, or by other agreements relating to trade.

2) Trading blocs

   • Distinguish between a free trade area, a customs union and a common market.
   
   • Explain that economic integration will increase competition among producers within the trading bloc.
   
   • Compare and contrast the different types of trading blocs.

3) Monetary union

   • Explain that a monetary union is a common market with a common currency and a common central bank.
   
   • Discuss the possible advantages and disadvantages of a monetary union for its members.
**Development Economics**

A) **Economic development**

1) **The nature of economic growth and economic development**

   (a) Economic growth and economic development
       • Distinguish between economic growth and economic development.
       • Explain the multidimensional nature of economic development in terms of reducing widespread poverty, raising living standards, reducing income inequalities and increasing employment opportunities.
       • Explain that the most important sources of economic growth in economically less developed countries include increases in quantities of physical capital and human capital, the development and use of new technologies that are appropriate to the conditions of the economically less developed countries, and institutional changes.
       • Explain the relationship between economic growth and economic development, noting that some limited economic development is possible in the absence of economic growth, but that over the long term economic growth is usually necessary for economic development (however, it should be understood that under certain circumstances economic growth may not lead to economic development).

   (b) Common characteristics of economically less developed countries
       • Explain, using examples, that economically less developed countries share certain common characteristics (noting that it is dangerous to generalize as there are many exceptions in each case), including low levels of GDP per capita, high levels of poverty, relatively large agricultural sectors, large urban informal sectors and high birth rates.
       • Explain that in some countries there may be communities caught in a poverty trap (poverty cycle) where poor communities are unable to invest in physical, human and natural capital due to low or no savings; poverty is therefore transmitted from generation to generation, and there is a need for intervention to break out of the cycle.

   (c) Diversity among economically less developed nations
       • Explain, using examples, that economically less developed countries differ enormously from each other in terms of a variety of factors, including resource endowments, climate, history (colonial or otherwise), political systems and degree of political stability.

   (d) International development goals
       • Outline the current status of international development goals, including the Millennium Development Goals.
B) **Measuring development**

1) Measurement methods

(a) Single indicators
   - Distinguish between GDP per capita figures and GNI per capita figures.
   - Compare and contrast the GDP per capita figures and the GNI per capita figures for economically more developed countries and economically less developed countries.
   - Distinguish between GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates.
   - Compare and contrast GDP per capita figures and GDP per capita figures at purchasing power parity (PPP) exchange rates for economically more developed countries and economically less developed countries.
   - Compare and contrast two health indicators for economically more developed countries and economically less developed countries.
   - Compare and contrast two education indicators for economically more developed countries and economically less developed countries.

(b) Composite indicators
   - Explain that composite indicators include more than one measure and so are considered to be better indicators of economic development.
   - Explain the measures that make up the Human Development Index (HDI).
   - Compare and contrast the HDI figures for economically more developed countries and economically less developed countries.
   - Explain why a country's GDP/ GNI per capita global ranking ay be lower, or higher, than its HDI global ranking.

C) **The role of domestic factors**

1) Domestic factors and economic development

(a) Domestic factors
   - With reference to a specific developing economy, and using appropriate diagrams where relevant, examine how the following factors contribute to economic development.
     a. Education and health
     b. The use of appropriate technology
     c. Access to credit and micro-credit
     d. The empowerment of women
     e. Income distribution
D) The role of international trade
1) International trade and economic development
   (a) Trade problems facing many economically less developed countries
       • With reference to specific examples, explain how the following factors are barriers to
devolution for economically less developed countries.
         a. Over-specialization on a narrow range of products
         b. Price volatility of primary products
         c. Inability to access international markets
         d. Trade strategies for economic growth and economic development
       • With reference to specific examples, evaluate each of the following as a means of
        achieving economic growth and economic development.
         a. Import substitution
         b. Export promotion
         c. Trade liberalization
         d. The role of the WTO
         e. Bilateral and regional preferential trade agreements
         f. Diversification

E) The role of foreign direct investment (FDI)
1) Foreign direct investment and multinational corporations (MNCs)
   (a) The meaning of FDI and MNCs
       • Describe the nature of foreign direct investment (FDI) and multinational corporations
       (MNCs).
       • Explain the reasons why MNCs expand into economically less developed countries.
       • Describe the characteristics of economically less developed countries that attract FDI,
        including low cost factor inputs, a regulatory framework that favours profit repatriation and
        favourable tax rules.
   (b) Advantages and disadvantages of FDI for economically less developed countries
       • Evaluate the impact of foreign direct investment (FDI) for economically less developed
        countries.
F) **The roles of foreign aid and multilateral development assistance**

1) **Foreign aid**
   
   (a) Classifications and types of aid
   - Explain that aid is extended to economically less developed countries either by governments of donor countries, in which case it is called official development assistance (ODA), or by nongovernmental organizations (NGOs).
   - Explain that humanitarian aid consists of food aid, medical aid and emergency relief aid.
   - Explain that development aid consists of grants, concessional long-term loans, project aid that includes support for schools and hospitals, and programme aid that includes support for sectors such as the education sector and the financial sector.
   - Explain that, for the most part, the priority of NGOs is to provide aid on a small scale to achieve development objectives.
   - Explain that aid might also come in the form of tied aid.
   - Explain the motivations of economically more developed countries giving aid.
   - Compare and contrast the extent, nature and sources of ODA to two economically less developed countries.
   
   (b) Evaluation of foreign aid
   - Evaluate the effectiveness of foreign aid in contributing to economic development.
   - Compare and contrast the roles of aid and trade in economic development.

2) **Multilateral development assistance**

   (a) The roles of the International Monetary Fund (IMF) and the World Bank
   - Examine the current roles of the IMF and the World Bank in promoting economic development.

G) **The role of international debt**

1) **Foreign debt**

   (a) Foreign debt and its consequences
   - Outline the meaning of foreign debt and explain why countries borrow from foreign creditors.
   - Explain that in some cases countries have become heavily indebted, requiring rescheduling of the debt payments and/or conditional assistance from international organizations, including the IMF and the World Bank.
   - Explain why the servicing of international debt causes balance of payments problems and has an opportunity cost in terms of foregone spending on development objectives.
   - Explain that the burden of debt has led to pressure to cancel the debt of heavily indebted countries.

H) **The balance between markets and intervention**

1) **Strengths and weaknesses of market-oriented policies**

   (a) Strengths
   - Discuss the positive outcomes of market-oriented policies (such as liberalized trade and capital flows, privatization and deregulation), including a more efficient allocation of resources and economic growth.

   (b) Weaknesses
   - Discuss the negative outcomes of market-oriented strategies, including market failure, the development of a dual economy and income inequalities.
2) **Strengths and weaknesses of interventionist policies**
   
   (a) **Strengths**
   
   • Discuss the strengths of interventionist policies, including the provision of infrastructure, investment in human capital, the provision of a stable macroeconomic economy and the provision of a social safety net.
   
   (b) **Weaknesses**
   
   • Discuss the limitations of interventionist policies, including excessive bureaucracy, poor planning and corruption.

3) **Mixed solution**

   (a) **Market with government intervention**
   
   • Explain the importance of good governance in the development process.
   
   • Discuss the view that economic development may best be achieved through a complementary approach, involving a balance of market oriented policies and government intervention.