

> Paper 1 (SL and HL) – markschemes

Unit 1 Introduction

Chapter 1 The foundations of economics

Core (SL and HL)

Chapter 1 has only Part (a) questions.

1.1 a Answers **may** include:

- Definition: production possibilities, free good.
- Explanation: of the production possibilities model, showing the maximum combinations of two goods that can be produced given full and efficient use of all resources, illustrating scarcity, choice and opportunity cost; since free goods are not subject to scarcity the issues of choice and opportunity cost do not arise therefore the model is not useful in explaining free goods.
- Diagram: production possibilities model.

1.2 a Answers **may** include:

- Definition: free market economy, planned economy, mixed economy.
- Explanation: of the three basic economic questions answered by all economies; distinction between the three types of economies (market, planned, mixed) by reference to the roles of the public versus private sectors with respect to resource ownership and economic decision-making; and the roles of price versus non-price rationing.
- Diagram: not necessary for this question.

1.3 a Answers **may** include:

- Definition: circular flow of income, interdependence, mixed economy.
- Explanation: of the model and the links between the decision-makers; households and firms are interdependent through their buying and selling activities; households as savers are linked together with firms as investors through financial markets; taxpayers are linked together with recipients of funds spent by the government; importers are linked together with sellers in other countries, while exporters are linked together with buyers in other countries.
- Diagram: circular flow of income model with leakages and injections.

HL only

Chapter 1 has no **HL only** questions.

Unit 2 Microeconomics

Chapter 2 Competitive markets: Demand and supply

Chapter 2 has only Part (a) questions at SL, but both Part (a) and Part (b) questions at HL.

Core (SL and HL)

2.1 a Answers may include:

- Definition: demand, law of demand, non-price determinants of demand, supply.
- Explanation: of price and quantity determination by demand and supply in a competitive market; of increases in demand that may occur over time with reference to non-price determinants of demand that cause demand to increase; increase in both equilibrium price and quantity that result when demand shifts to the right; conclusion that the law of demand is not violated.
- Diagram: a competitive market with demand shifting to the right resulting in a higher equilibrium price and quantity.

2.2 a Answers may include:

- Definition: marginal benefit (*MB*), marginal cost (*MC*), allocative efficiency, market equilibrium.
- Explanation: of free competitive market, and of market equilibrium and allocative efficiency, with reference to the relationship between *MB* and the demand curve and *MC* and the supply curve; reference to the idea that allocative efficiency occurs when the benefit received by consumers for consuming the last unit is equal to the cost of producing that last unit. The response may also include consumer, producer or social surplus concepts with reference to maximum social surplus that occurs when there is allocative efficiency.
- Diagram: demand and supply diagram showing that at the market equilibrium where the demand and supply curves intersect, $MB = MC$.

HL only

2.3 a Answers may include:

- Definition: demand, utility, supply, law of demand, law of supply, marginal produce.
- Explanation: of law of diminishing marginal utility and how it related to the law of demand; of law of diminishing marginal returns, how it relates to the firm's marginal costs, and how the marginal cost curve defines the firm's supply curve.
- Diagram: demand curve illustrating law of demand; supply curve illustrating law of supply.

2.3 b Answers may include:

- Definition: behavioural economics, consumer behaviour, rational consumer choice.
- Explanation: of the critique of rational consumer behaviour/choice due to such limitations as biases, bounded rationality, self-control and selfishness, imperfect information; the contributions of choice architecture and nudges.
- Diagram: not necessary for this question.
- Synthesis (discuss): balanced consideration of the contributions, with reference to potential advantages over rational consumer choice and possible limitations.
- Examples: real-world examples where governments or other bodies have used choice architecture or nudges have been used to encourage or discourage certain behaviours (see coursebook for examples).

Chapter 3 Elasticities

Core (SL and HL)

3.1 a Answers may include:

- Definition: income elasticity of demand, income elastic, income inelastic, inferior good, normal good.
- Explanation: of income elasticity of demand, of positive YED where a normal good has $YED > 1$ for a luxury/service or $YED < 1$ for a necessity; of negative YED where a good is inferior.
- Diagram: Engel curve showing the range where a good is inferior, necessity, luxury/service.

3.1 b Answers may include:

- Definition: revenue, price elasticity of demand.
- Explanation: of elastic demand ($PED > 1$), inelastic demand ($PED < 1$) and unit elastic demand ($PED = 1$). If $PED > 1$, price and total revenue change in opposite directions; if $PED < 1$, price and total revenue change in the same direction; if $PED = 1$, total revenue is unaffected by a change in price.
- Diagram: showing how PED varies along a straight-line demand curve, and the values of PED along different price ranges; showing what happens to TR depending on the value of PED .
- Synthesis (evaluate): appropriate pricing strategies by taxi drivers interested in increasing total revenue require knowledge of PED for their services.
- Examples: real-world examples where firms' decisions to change their price have been influenced by PED ; e.g. Uber's surge pricing showing how prices increase during peak hours.

HL only

3.2 a Answers may include:

- Definition: primary commodities, manufactured goods, price elasticity of supply.
- Explanation: of price elasticity of supply (PES), price elastic supply, price inelastic supply; reference to the factors of time and costs of extraction that determine why PES for primary commodities is generally low ($PES < 1$) and why PES for manufactured goods is relatively high ($PES > 1$).
- Diagram: showing elastic and inelastic supply.

3.1 b Answers may include:

- Definition: primary products, manufactured products, income elasticity of demand.
- Explanation: of differing YED s for primary products, manufactured products and services.
- Diagram: Engel curve showing the range of income elastic, income inelastic and inferior goods.
- Synthesis (examine): consideration of how the rate of growth of industries may be affected by the YED of the respective products produced; the relevance of this to rates of growth and profitability of firms within these industries; the possibility of growth of an industry producing inferior goods during recession; the relative rates of growth of the primary, secondary and services sectors with the primary sector shrinking and the services sector increasing as a share of the total as an economy grows.
- Examples: real-world examples of goods and services with varying values of YED as incomes change over time; real-world examples of changing shares of primary, manufacturing and services sectors over time.

Chapter 4 Government intervention in microeconomics

Core (SL and HL)

4.1 a Answers may include:

- Definition: indirect taxes, subsidies, allocative efficiency/inefficiency.
- Explanation: of the free competitive market (demand and supply) and achievement of allocative efficiency in relation to social surplus and marginal benefits (MB) and marginal costs (MC); of an indirect tax leading to welfare loss and $MB > MC$ (underallocation of resources/underproduction), hence allocative inefficiency; of a subsidy leading to welfare loss and $MC > MB$ (overallocation of resources/overproduction), hence allocative inefficiency.
- Diagram: one showing effects of an indirect tax, another showing effects of a subsidy.

4.1 b Answers may include:

- Definition: subsidy, price floor.
- Explanation: of government intervention in free competitive markets in the case of subsidies and price floors, with reference to the points that in both cases the quantity of the good produced and consumed will increase and allocative inefficiency will result because there will be an overallocation of resources to the production of the good, since $MC > MB$.
- Diagram: showing the effects of the granting of a subsidy and the imposition of a price floor.
- Synthesis (compare and contrast): similarities such as increased output, overproduction and overallocation of resources, producers become better off, government budget is worse off, society is worse off because of welfare loss, foreign producers are worse off; differences such as a subsidy leads to an equilibrium whereas a price floor leads to disequilibrium with a surplus of the good that must be purchased by the government; with a subsidy consumers pay a lower price, whereas with a price floor they pay a higher price; with a subsidy consumers buy a larger quantity, whereas with a price floor they buy a smaller quantity; with a subsidy consumer surplus increases, whereas with a price floor it falls; the government budget is worse off in both cases, but with price floors there are extra costs due to the need to store and dispose of the surplus.
- Examples: real-world examples of granting of subsidy or price floor by a government, e.g. subsidy and price floor for sugar in the United States.

4.2 a Answers may include:

- Definition: price floors, price ceilings, indirect taxes (or whatever is relevant to the choice of reasons).
- Explanation: of any three of the following: earn government revenue, support firms, support households on low incomes, influence production levels, influence consumption levels, correct market failure, promote equity.
- Diagram: any diagram(s) that support(s) the three reasons for government intervention.

4.2 b Answers may include:

- Definition: price ceiling.
- Explanation: of the imposition of a price ceiling and its effects on the market including shortages, smaller quantity produced and consumed.
- Diagram: showing a price ceiling and its effect on the market.
- Synthesis (examine): consideration of the effects on consumers some of whom gain while others are worse off; the issue of unfairness, on producers who are worse off and who face reduced incentives to produce, on society that has welfare loss; the emergence of non-price rationing and parallel markets.
- Examples: real-world examples of the use of price ceilings on food products.

HL only

Chapter 4 has no HL only questions that are examined in Paper 1.

Chapter 5 Market failure and socially undesirable outcomes I: Common pool resources and negative externalities

Core (SL and HL)

5.1 a Answers **may** include:

- Definition: indirect tax, price inelastic demand, negative consumption externality.
- Explanation: of price elasticity of demand (*PED*), price elastic and price inelastic demand; indirect taxes as a method to reduce negative consumption externalities involving pollution.
- Diagram: showing a negative consumption externality with inelastic demand for petrol (gasoline) resulting in higher tax revenues and smaller reduction of quantity demanded.

5.1 b Answers **may** include:

- Definition: demerit goods, negative consumption externalities, market failure.
- Explanation: of market failure arising from the consumption of demerit goods such as petrol (gasoline) (negative consumption externalities) and alternative policies to deal with these externalities: legislation and regulations, negative advertising, indirect taxes.
- Diagram: showing how the alternative policies may correct the problem of negative consumption externalities.
- Synthesis (discuss): relative strengths and weaknesses of alternative policies listed above; relative strengths and weaknesses of market-based policies versus government regulation and legislation; impacts on stakeholders; consideration of what may be more effective.
- Examples: real-world examples of alternative policies used to deal with negative consumption externalities and their effects.

5.2 a Answers **may** include:

- Definition: tragedy of the commons, common pool resources, market failure.
- Explanation: of the overuse of common pool resources, the role of rivalry and non-excludability; the problem of market failure and unsustainable resource use.
- Diagram: not necessary for this question; students may include a negative production externality diagram.

5.2 b Answers **may** include:

- Definition: sustainability, negative production and consumption externalities, the two policies selected.
- Explanation: of market failure arising from negative consumption and production externalities and alternative policy responses to deal with these: legislation and regulations, advertising, indirect taxes, tradable pollution permits, measures to combat poverty that threatens sustainability.
- Diagram: show how alternative policies may correct the problem of negative externalities.
- Synthesis (examine): relative strengths and weaknesses of alternative policies (legislation and regulations, advertising, indirect taxes, tradable pollution permits and others); the relative strengths and weaknesses of market-based policies versus government regulation and legislation; consideration of what may be more effective.
- Examples: real-world examples of alternative policies used to deal with negative production externalities and their effects.

HL only

Chapter 5 has no **HL only** questions that are examined in Paper 1.

Chapter 6 Market failure and socially undesirable outcomes II: Positive externalities, public goods, asymmetric information and inability to achieve equity

Core (SL and HL)

6.1 a Answers **may** include:

- Definition: merit good, positive consumption externality, market failure.
- Explanation: of positive consumption externality with marginal social benefits greater than marginal private benefits, underallocation of resources by the market, welfare loss.
- Diagram: showing a positive consumption externality.

6.1 b Answers **may** include:

- Definition: merit good, positive consumption externality, market failure.
- Explanation: of alternative policies such as legislation, education and awareness creation, consumer nudges (HL), subsidies, direct government provision.
- Diagram: of the effects of policies that may increase D or that may increase S, moving the economy closer to the social optimum.
- Synthesis (discussion): consideration of the extent to which the policies are successful in attaining their goal to increase consumption of these services; the possible advantages of some policies over others, possible disadvantages.
- Examples: real-world examples of alternative policies used to deal with the positive consumption externalities of education and health care and their effects.

HL only

6.2 a Answers **may** include:

- Definition: adverse selection, moral hazard, information asymmetries, market failure.
- Explanation: of underprovision or overprovision of the good or service hence resource misallocation that arises in the cases of both adverse selection and moral hazard.
- Diagram: not necessary for this question.

6.2 b Answers **may** include:

- Definition: adverse selection, moral hazard, information asymmetries, market failure.
- Explanation: of government responses including legislation, regulation and provision of information as well as private responses such as signaling and screening.
- Diagram: not necessary for this question.
- Synthesis (evaluation): consideration of advantages and limitations of the above policies, which are likely to be more effective in achieving their objective under various circumstances.
- Examples: real-world examples of government initiatives to provide information or enact legislation to address the problem of information asymmetries.

Chapter 7 Market failure and socially undesirable outcomes III: Market power (HL only)

Core (SL and HL)

Chapter 7 has no Core (SL and HL) questions that are examined in Paper 1.

HL only

7.1 a Answers may include:

- Definition: perfect competition, imperfect competition, price-taker, price-maker, market power.
- Explanation: of perfect competition, where firms face a perfectly elastic demand curve at the level of the price determined in the market which each firm accepts; versus imperfect competition where firms face a downward sloping demand curve and thus have varying degrees of market power (ability to set price).
- Diagram: industry and firm in perfect competition, where each firm accepts the price determined in the market; a downward sloping demand curve for firms in imperfect competition.

7.1 b Answers may include:

- Definition: perfect competition, economies of scale.
- Explanation: of economies of scale and factors that allow for these to be achieved; the model of perfect competition, which, consisting of small firms that do not grow to a large size, have very limited possibilities to achieve economies of scale.
- Diagram: long-run average cost curve (*LRAC*) indicating the range of average costs over which a firm achieves economies of scale.
- Synthesis or evaluation (examine): consideration of the strengths/usefulness of the model of perfect competition, including the achievement of productive and allocative efficiency, maximum social (consumer plus producer) surplus, production where marginal benefits (*MB*) equal marginal costs (*MC*); low prices and higher quantities produced compared to other market structures, competition leads to closure of inefficient firms, etc.; weaknesses of the model, including factors that make it unrealistic, such as inability to achieve economies of scale, lack of product variety and others; reference to the point that it is generally used as a standard or benchmark for assessing real-world industries with respect to their achievement of productive and allocative efficiency.
- Examples: real-world examples of markets (such as in agriculture) that come close to perfect competition and do not have economies of scale but show other desirable features such as price competition, as opposed to imperfectly competitive markets where there are economies of scale but undesirable features such as abuse of market power; may also refer to real-world examples of economies of scale.

7.2 a Answers may include:

- Definitions: market power, market failure, welfare loss.
- Explanation: how monopoly power leads to market failure and allocative and productive inefficiency; marginal benefits (= price) greater than marginal costs at profit-maximising output; welfare loss.
- Diagram: showing monopoly welfare loss and inefficiencies; perfect competition with maximum consumer and producer (social) surplus.

7.2 b Answers may include:

- Definition: market power, abuse of market power.
- Explanation: of government responses, e.g. legislation to protect competition and regulate mergers, government ownership, regulation of natural monopoly, imposition of fines.
- Diagram: showing monopoly resulting in higher prices, lower quantities, welfare loss in comparison with competitive market structures.
- Synthesis (discuss): consideration of need for government responses to abuse of market power, potential benefits of and dilemma posed by natural monopoly, strengths and weaknesses of alternative responses, relative effectiveness of various policies, possible effects on stakeholders.
- Examples: real-world examples of governments intervening in markets with high degrees of market power and instances of abuse.

Unit 3 Macroeconomics

Chapter 8 The level of overall economic activity

Core (SL and HL)

8.1 a Answers **may** include:

- Definition: national income accounting, circular flow of income.
- Explanation: of the three approaches to national income accounting, referring to the components of each; how each approach corresponds to a flow in the circular flow of income model, resulting in equivalence between them, since the total income of factors of production is equal to the spending on goods and services, which is also equal to the value of output.
- Diagram: circular flow model.

8.1 b Answers **may** include:

- Definition: national income statistics, standard of living, GNI.
- Explanation: of limitations due to various factors such as non-marketed output, parallel markets, quality improvements, increased leisure, environmental destruction, depletion of natural resources; ignores composition of output (merit goods versus other goods), ignores distribution of income, ignores quality of life factors (peace, well-functioning institutions).
- Diagram: not necessary for this question.
- Synthesis: some of the above factors underestimate standard of living, others overestimate it; as a result, using GNI (or GNI per capita) to compare standard of living over time or across countries is bound to be inaccurate.
- Examples: real-world examples of countries that have comparable GNI *per capita*, but very different achievements with regard to education, health, income distribution, extent of parallel markets, etc. (Note: students can benefit from a consideration of the topics in Chapter 17 regarding measurement of economic development.)

8.2 a Answers **may** include:

- Definition: GDP, GNI, *per capita*.
- Explanation: of the significance of income per person in contrast to output per person; what factors account for the difference between GNI and GDP; the importance of using *per capita* figures rather than totals; why GNI *per capita* is a better indicator of average income levels.
- Diagram: not necessary for this question.

HL only

Chapter 8 has no **HL only** questions that are examined in Paper 1.

Chapter 9 Aggregate demand and aggregate supply

Core (SL and HL)

9.1 a Answers **may** include:

- Definition: inflationary gap, recessionary gap.
- Explanation: of short-run equilibrium with reference to the point that the actual equilibrium of an economy may differ from potential output; inflationary gaps occur due to an excess of aggregate demand and recessionary gaps due to a deficiency of aggregate demand relative to what is needed to achieve equilibrium at potential (or full employment) output. Examples of factors that result in increases or decreases in aggregate demand.
- Diagram: illustrating inflationary and recessionary gaps (either the monetarist/new classical or Keynesian model).

9.1 b Answers **may** include:

- Definition: recessionary gap.
- Explanation: of the monetarist/new classical model where a recessionary gap occurs only in the short-run; in the long-run wages and prices will fall such that the *SRAS* shifts to the right until the economy reaches full-employment output; of the Keynesian model according to which wage-price downward inflexibility means that the economy will get stuck in the recessionary gap.
- Diagram: showing the monetarist/new classical model where *SRAS* shifts to the right restoring long-run full-employment equilibrium; and the Keynesian model with a recessionary gap.
- Synthesis (compare and contrast): consideration of the degree of realism of the assumption of full wage-price flexibility; comparison of the two models with respect to recession or inflation and the policy implications.
- Examples: real-world examples of countries in recession and of expansionary fiscal or monetary policies to increase *AD*; use of such policies demonstrates the Keynesian perspective but also the principle that waiting for the economy to adjust automatically in accordance with the monetarist/new classical model would likely take far too long and no government is willing to accept the political costs this would involve.

9.2 a Answers **may** include:

- Definition: aggregate supply, long-run aggregate supply, Keynesian aggregate supply.
- Explanation: of the vertical shape of the *LRAS* curve (the level of real output is independent of the price level) and the Keynesian *AS* curve (factors accounting for the curve's three sections).
- Diagram: *LRAS* curve, Keynesian *AS* curve.

9.2 b Answers **may** include:

- Definition: of aggregate demand, monetarist/new classical, Keynesian.
- Explanation: of effects of increases in aggregate demand in the two models, referring to the point that in the monetarist/new classical model these are always inflationary (in the short run they result in an increase in real output as well; in the long run they give rise only to increases in the price level); in the Keynesian model the effects depend on which of the three sections of the *AS* curve the *AD* increase occurs.
- Diagram: illustrating the two models and the effects of *AD* increases.
- Synthesis (compare and contrast): arguments **may** include: points of similarity, such as that *AD* increases are inflationary in both cases when *AD* increases occur anywhere on the Keynesian *AS* curve other than the horizontal section; points of difference, such as the shapes of the *AS* curves, the assumptions on which the models rest, *AD* increases on the horizontal part of the *AS* curve (indicating recession in the economy).
- Examples: real-world examples illustrating increases in aggregate demand with similar or contrasting effects on the price level; for example, an economy that is in recession experiences an increase in *AD* and real GDP without inflationary pressures, but as the economy heats up inflationary pressures emerge thus lending support to the Keynesian perspective.

HL only

Chapter 9 has no **HL only** questions that are examined in Paper 1.

Chapter 10 Macroeconomic objectives I: Low unemployment, low and stable rate of inflation

Core (SL and HL)

10.1 a Answers **may** include

- Definition: natural rate of unemployment; frictional, seasonal and structural unemployment.

- Explanation: of unemployment occurring when the economy is producing potential output, when cyclical unemployment is zero; of frictional, seasonal, structural unemployment.
- Diagram: *AD-AS* model showing full employment equilibrium real GDP.

10.1 b Answers **may** include:

- Definition: inflation, unemployment.
- Explanation: of economic policies that try to lower the rate of inflation; of the economic and social costs of unemployment and of inflation; reference to inflation targeting.
- Diagram: not necessary for this question.
- Synthesis (discuss): consideration of possible conflict between low inflation and low unemployment; for example, in a deflationary gap, as demand-side policies bring the economy close to potential output cyclical unemployment falls, but the price level begins to rise (as in the Keynesian perspective; no need to refer to Phillips curve); consideration of the relative economic and social costs of inflation and unemployment; also important may be how high inflation is compared to how high unemployment is; since unemployment has a stronger negative impact on well-being than inflation government policy should prioritise low unemployment rather than inflation.
- Examples: real-world examples of cases of high inflation and high unemployment with the consequences of each.

10.2 a Answers **may** include:

- Definitions: inflation, price index, consumer price index.
- Explanation: of inflation with reference to the use of the consumer price index as a measure of the rate of inflation for the typical household, as well as difficulties presented by the presence of different income earners, changes in consumption patterns, changes in product quality, international comparisons, etc.
- Diagrams: illustrating inflation (demand-pull or cost-push).

10.2 b Answers **may** include:

- Definitions: inflation, deflation.
- Explanation: of inflation and deflation, with reference to causes and costs/consequences, such as redistributive effects, uncertainty, risk of deflationary spiral, reduced international competitiveness, the potentially serious effects of deflation.
- Diagrams: illustrating inflation and deflation.
- Synthesis (discuss): arguments **may** include: points of difference and similarity between inflation and deflation with respect to costs and consequences; effects on stakeholders, the problem of hyperinflation, that deflation occurs rarely, that central banks usually prefer mild inflation to deflation in view of the latter's potentially very serious consequences; importance of achieving disinflation rather than deflation.
- Examples: real-world examples of inflation and deflation illustrating the difficulties posed by deflation; examples of efforts by central banks to avoid deflation.

HL only

10.3 a Answers **may** include:

- Definitions: inflation, unemployment, stagflation, Phillips curve.
- Explanation: the short-run Phillips curve, with reference to outward shifts of the curve that occur as a result of stagflation, due to a decrease in short-run aggregate supply, involving higher inflation and higher unemployment.
- Diagram: showing the short-run Phillips curve shifting outward, the *AD-AS* model with leftward *SRAS* curve shifts.

10.3 b Answers **may** include:

- Definition: short-run Phillips curve, long-run Phillips curve.
- Explanation: of the trade-off between inflation and unemployment offered by the short-run Phillips curve in contrast to the long-run Phillips curve according to which the unemployment rate is independent of the price level because the economy will automatically revert to the natural rate of unemployment in the long run.
- Diagram: short-run and long-run Phillips curves.
- Synthesis (compare and contrast): the short-run curve offers a choice between lower inflation at the cost of higher unemployment, while the long-run curve does not offer such a choice; contractionary policy at some point will lower the rate of inflation but unemployment will remain the same, while expansionary policy will increase the rate of inflation while not lowering unemployment. Consideration of the practical difficulties of determining the natural rate in practice and the possibly unstable relationship between inflation and unemployment make the Phillips curve policy implications difficult to follow.
- Examples: real-world examples of central banks that try to estimate the level of potential output in order to determine whether expansionary policies intended to increase real GDP are likely to be inflationary or not

Chapter 11 Macroeconomic objectives II: Economic growth, sustainable level of debt

Core (SL and HL)

11.1 a Answers **may** include:

- Definition: investment, economic growth, long-term growth.
- Explanation: of the *PPC* and *AD-AS* models with reference to *LRAS*; of the principle that investment involves new capital goods and therefore results in an increase of capital which is a factor of production; any such increase results in an outward shift of the *PPC* and the *LRAS* curves representing long-term growth.
- Diagram: showing *PPC* and *LRAS* shifting outward.

11.1 b Answers **may** include:

- Definition: growth, living standards, distribution of income.
- Explanation: of both positive and negative effects of growth on both living standards and the distribution of income.
- Diagram: showing a Lorenz curve diagram with the Lorenz curve shifting closer or further away from the line of perfect equality to illustrate better or worse income distribution (after Chapter 12).
- Synthesis (evaluate): whether the effects are positive or negative depends on the particular policies adopted to achieve growth; consideration of particular factors that have positive effects on living standards and income distribution such as investment in human capital, provision of merit goods.
- Examples: real-world examples where countries experiencing economic growth have had both positive and negative effects on living standards and distribution of income.

HL only

11.2 a Answers **may** include:

- Definition: government debt.
- Explanation: of possible costs including debt servicing, poor credit rating, increased income inequality, lower private investment.
- Diagram: not necessary for this question,

Chapter 11 has no Part (b) **HL only** questions.

Chapter 12 Economics of inequality and poverty

Core (SL and HL)

12.1 a Answers **may** include:

- Definition: direct taxes, indirect taxes, progressive taxes.
- Explanation: of how progressive income taxes work to reduce the difference between people on low and high incomes; reference to regressive nature of indirect taxes; ability to use revenues from taxes to provide merit goods and transfer payments.
- Diagram: showing Lorenz curve moving toward the line of perfect income equality.

12.1 b Answers **may** include:

- Definition: poverty, economic inequality, any two of the stated policies.
- Explanation: of how two of these approaches can make income distribution more equal.
- Diagram: showing Lorenz curve moving toward the line of perfect income equality.
- Synthesis (evaluation): consideration of advantages and disadvantages of the two methods; the degree of effectiveness of each with respect to achieving its goal.
- Examples: real-world examples of two policies of the above with their effects on poverty and income inequality.

12.2 a Answers **may** include:

- Definition: Gini coefficient, Lorenz curve, distribution of income.
- Explanation: of how the Gini coefficient is derived from the Lorenz curve diagram; of Flatland with the lower Gini coefficient having a more equal distribution of income.
- Diagram: showing two Lorenz curves.

12.2 b Answers **may** include:

- Definition: absolute poverty, relative poverty, economic growth.
- Explanation: of the negative effects of income and wealth inequality on economic growth; of the reasons why inequalities impact negatively on economic growth.
- Diagram: not necessary for this question.
- Synthesis (evaluate): consideration of the importance of relative poverty which may be increasing even if absolute poverty is decreasing; increasing relative poverty means growing inequalities; of the vicious cycle that can be set into motion whereby inequalities lead to lower growth and policies to achieve higher growth lead to increased inequalities.
- Examples: real-world examples of a country or countries where reductions in poverty have been accompanied by high or increasing inequalities which are unlikely to be conducive to high rates of growth in spite of the reductions in poverty.

HL only

Chapter 12 has no **HL only** questions that are examined in Paper 1.

Chapter 13 Demand-side and supply-side policies

Core (SL and HL)

13.1 a Answers **may** include:

- Definition: interest rate, full employment, inflation.
- Explanation: of interest as used in monetary policy to decrease AD in an inflationary gap or increase AD in a deflationary gap.
- Diagram: showing $AD-AS$ model with AD increasing in a deflationary gap and increasing in an inflationary gap.

13.1 b Answers **may** include:

- Definitions: fiscal policy, monetary policy, recession.
- Explanation: fiscal and monetary policy to deal with recession, with reference to their strengths and weaknesses.
- Diagram: *AD-AS* model showing a recessionary (deflationary) gap and the *AD* curve shifting to the right in order to close the gap.
- Synthesis (compare and contrast): consideration of points of similarity and difference with respect to the effectiveness of these policies, such as time lags, strength of impact on aggregate demand, political constraints, inability to deal with supply-side causes of instability, flexibility, reversibility, crowding out, relative effectiveness in recession.
- Examples: real-world examples illustrating the ineffectiveness of monetary policy in a deep recession, thus requiring fiscal policy to deal with it.

HL only

13.2 a Answers **may** include:

- Definition: real GDP, multiplier, crowding out.
- Explanation: of the effects of the multiplier and crowding out on aggregate demand, therefore on real GDP; whichever *AD* shift is larger will determine the effect on real GDP.
- Diagram: *AD-AS* with *AD* shifting to the right due to the multiplier and shifting to the left due to the crowding-out effect.

13.2 b Answers **may** include:

- Definitions: automatic stabilisers, business cycle, fiscal policy, inflationary gap, deflationary gap.
- Explanation: of business cycle fluctuations; of how automatic stabilisers (unemployment benefits and progressive taxes) work to make changes in aggregate demand less pronounced.
- Diagram: business cycle, *AD-AS*.
- Synthesis (discuss): the importance of automatic stabilisers in fiscal policy in making business cycle fluctuations less intense in the absence of any government intervention, thus lessening the need for government policy in its objectives to maintain full employment and price stability.
- Examples: real-world examples of the role of unemployment benefits and progressive taxes in reducing the fluctuations of the business cycle.

Unit 4 The Global Economy

Chapter 14 International trade: Part I

Core (SL and HL)

14.1 a Answers **may** include:

- Definition: barriers to trade.
- Explanation: that a country will become an importer if the domestic price without trade is higher than the world price, whereas it will become an exporter if the domestic price without trade is lower than the world price.
- Diagram: international trade diagrams showing a higher domestic price for the importer and a lower domestic price for the exporter.

14.1 b Answers **may** include:

- Definition: trade protection, production subsidies, tariffs, welfare loss.
- Explanation: of the effects of production subsidies and tariffs on stakeholders including explanation of changes in consumer and producer surplus and welfare losses in the case of each one and how they differ.

- Diagram: international trade showing the welfare effects of a production subsidy and a tariff.
- Synthesis (discuss): while both production subsidies and tariffs lead to increased domestic output and restriction of the quantity of imports, from a welfare point of view production subsidies do not affect consumer surplus, which remains the same; welfare losses may therefore be smaller hence subsidies could be preferable to tariffs.
- Examples: real-world examples where production subsidies and tariffs are used as trade protection measures.

HL only

14.2 a Answers may include:

- Definition: *PPC* model, specialisation, comparative advantage.
- Explanation: of maximum production in the *PPC* model given full employment and efficient production; of the possibility to increase consumption beyond the *PPC* if countries specialise in producing and exporting the good in which they have comparative advantage due to increases in allocative efficiency so they can consume outside their *PPC*.
- Diagram: of a *PPC* with consumption on the *PPC* without trade and outside the *PPC* with trade based on comparative advantage.

14.2 b Answers may include:

- Definition: specialisation, comparative advantage.
- Explanation: of the theory of comparative advantage and how trade according to this principle results in increased production and consumption and improved global allocation of resources; however, there are a number of limitations.
- Diagram: showing two *PPCs* of two countries producing two products, each country specialising according to its comparative advantage so that they end up consuming outside their *PPC*.
- Synthesis (evaluate): consideration of the positives and negatives of the application of the theory of comparative advantage; it has formed the basis of trade liberalisation policies which have benefitted some countries while hurting others (Chapter 20); it is subject to a number of limitations, such as the unrealistic assumptions on which it rests, the risk of excessive specialisation with all its shortcomings, and it may prevent developing countries from undergoing necessary structural change.
- Examples: real-world examples illustrating some negative and positive aspects of specialisation and trade according to comparative advantage.

Chapter 15 International trade: Part II

Core (SL and HL)

15.1 a Answers may include:

- Definition: trading bloc, monetary union.
- Explanation: explanation of free trade area, customs union, common market, monetary union; reference to successively higher forms of economic integration that each one represents; may refer to difficulties in achieving higher forms of integration.
- Diagram: not necessary for this question.

15.1 b Answers may include:

- Definition: trade protection.
- Explanation: of various trade protection measures such as tariffs, quotas, subsidies, administrative barriers; of the benefits of free trade and arguments against trade protection such as reduced efficiency, consumer losses, reduced export competitiveness, risk of trade wars; on the other hand, there are certain cases where some trade protection might be justified.
- Diagram: a trade protection diagram of the student's choice.

- Synthesis (evaluate): consideration of the pros and cons of alternative arguments; consideration of particular circumstances where trade protection is justifiable such as the infant industry argument, national security, efforts of a developing country to diversify its production, or health, safety and environmental standards; however there are other trade protection arguments that not easily justifiable on economic grounds, such as correcting a balance of payments deficit or protection of domestic jobs.
- Examples: real-world examples illustrating cases where trade protection has had negative effects, but other cases where trade protection has had a positive impact (such as infant industries).

15.2 a Answers **may** include:

- Definition: World Trade Organization (WTO).
- Explanation: of the functions of the WTO such as providing a forum for trade negotiations and handling trade disputes; of the challenges it faces such as difficulties in reaching agreements on agricultural protection and services, unequal member bargaining power, fragmentation of global trade, the blocking of its powers to resolve disputes.
- Diagram: not necessary for this question.

15.2 b Answers **may** include:

- Definition: free trade area.
- Explanation: of the expected benefits of joining an FTA such as greater competition, efficiency, lower prices, greater choice; consideration of potential costs such as increased unemployment if firms are unable to compete, loss of sovereignty.
- Diagram: a trade protection diagram of the student's choice illustrating the effects of removal of protection.
- Synthesis (discuss): consideration of an FTA as the lowest form of economic integration; the issue arising if imports enter the FTA by going into a low protection country; consideration of whether the benefits outweigh the costs; possible unequal distribution of gains and losses among trading partners (it is recommended that this is revisited after Chapter 20).
- Examples: real-world examples of an FTA illustrating advantages and disadvantages of membership.

HL only

15.3 b Note that this question is similar to Question 15.2 b, only it includes the concepts of trade creation and trade diversion, which are the only HL topics included in this chapter.

Chapter 15 has no part (a) **HL only** questions that are examined in Paper 1.

Chapter 16 Exchange rates and the balance of payments

Core (SL and HL)

16.1 a Answers **may** include:

- Definition: depreciation, exchange rate.
- Explanation: of any three factors of demand for exports, demand for imports, foreign direct investment, portfolio investment, remittances, speculation, relative inflation rates or interest rates or growth rates, central bank intervention, referring in each case to whether it is the demand or supply of the currency that is being affected.
- Diagram: of a foreign exchange market showing currency demand decreasing or currency supply increasing.

16.1 b Answers **may** include:

- Definition: currency devaluation.
- Explanation: of the effects of devaluation on the rate of inflation, unemployment, economic growth, the current account balance, standards of living.

- Diagram: *AD-AS* showing various effects of changes in aggregate demand such as on the rate of inflation, real GDP.
- Synthesis (discuss): consideration of potential positive versus negative effects depending on various circumstances of the country, such as how close it is to potential output, how dependent producers are on imported inputs, whether economic growth leads to investment spending with supply-side effects, if there is a trade deficit and how large it is.
- Examples: real-world examples of countries that have undergone devaluation, illustrating its effects.

16.2 a Answers **may** include:

- Definition: balance of payments, current account, capital account, financial account.
- Explanation: that the accounts must add up to zero because debits are equal to credits, and a deficit in one or more account must be matched by a surplus in one or more account; link to the demand of a currency to the supply of a currency.
- Diagram: showing a foreign exchange diagram where currency demand equals currency supply, illustrating the equality between debits and credits.

16.2 b Answers **may** include:

- Definition: currency appreciation.
- Explanation: of the effects of appreciation on the rate inflation, unemployment, economic growth, the current account balance, standards of living.
- Diagram: *AD-AS* showing various effects of changes in aggregate demand such as on the rate of inflation, real GDP.
- Synthesis (evaluation): consideration of potential positive versus negative effects depending on various circumstances of the country, such as how close it is to potential output, how dependent producers are on imported inputs, if there is a trade surplus and how large it is.
- Examples: real-world examples of countries that have experienced currency appreciation illustrating its effects.

> **HL only**

Chapter 16 has no **HL only** questions that are examined in Paper 1.

Chapter 17 Further topics on exchange rates and the balance of payments (HL only)

17.1 a Answers **may** include:

- Definition: current account deficit, exchange rate.
- Explanation: of the likely effects of a persistent current account deficit on the country's exchange rate, interest rate, foreign ownership of domestic assets, debt, credit ratings, demand-side policies, economic growth.
- Diagram: a foreign exchange diagram where an excess of imports over exports is shown by a falling demand for the currency or an increase in the supply of the currency, putting a downward pressure on the exchange rate.

17.1 b Answers **may** include:

- Definition: expenditure-switching, expenditure-reducing, current account deficit.
- Explanation: of alternative measures included in these two types of policies and how they are expected to reduce the size of a current account deficit.
- Diagram: *AD-AS* showing possible effects of a policy on aggregate demand, the price level and real GDP; or a J-curve showing the possible effects of depreciation (a type of expenditure-switching policy).

- Synthesis (evaluate): advantages and disadvantages of the range of measures included in these two types of policies, such as the creation of recession by reducing aggregate demand, or promoting inefficiencies and higher domestic prices by imposing trade protection, or by creating inflationary pressures through currency depreciation.
- Examples: real-world examples of countries that have used these policies to deal with persistent current account deficits.

17.2 a Answers **may** include:

- Definition: Marshall-Lerner condition, J-curve effect, current account deficit.
- Explanation: of the possible currency depreciation or devaluation in the country with the current account deficit, either due to market forces or to government policy; of the expected improvement in the current account balance occurring only if the Marshall-Lerner condition is satisfied, which is shown by the upward sloping portion of the J-curve effect.
- Diagram: showing a J-curve where the improvement in the current account begins at the point in time when the Marshall-Lerner condition is satisfied.

17.2 b Answers **may** include:

- Definition: monetary union.
- Explanation: of what monetary union involves; adoption of a single currency and single central bank for monetary policy; reference to the high degree of integration involved; loss of sovereignty.
- Diagram: not necessary for this question.
- Synthesis (discuss): consideration of similarity with a system of fixed exchange rates; potential advantages such as no exchange rate risk, increased certainty, no transaction costs, promotion of investment; potential disadvantages such as loss of monetary policy and exchange rate policy; a single monetary policy has different impacts on member countries depending on where the economy is in the business cycle; consideration of benefits versus costs depending on various factors such as whether an economy has a current account deficit or surplus.
- Examples: real-world example of a country in a monetary union illustrating advantages and disadvantages or two countries with different experiences.

Chapter 18 Understanding economic development

Core (SL and HL)

18.1 a Answers **may** include:

- Definition: economic development.
- Explanation: of a variety of single indicators; of composite indicators such as the Human Development Index, Gender Inequality Index, Inequality adjusted Human Development Index, with reference to the components of each; reference to the superiority of composite indicators.
- Diagram: not necessary for this question.

18.1 b Answers **may** include:

- Definition: economic growth, economic development.
- Explanation: of economic development as a process with many dimensions of which increase in real *per capita* output or income is only one.
- Diagram: not necessary for this question.
- Synthesis (evaluate): economic growth need not lead to economic development as the benefits of growth may be enjoyed by a small portion of the population; economic growth may result in more unequal income distribution hence less economic development (see also the discussion in Chapter 11 on the consequences of economic growth); reference to several single and composite indicators of economic development which show that countries with similar levels of GDP or GNI *per capita* have widely differing levels of achievement in different aspects of development.
- Examples: real-world examples of countries with high levels of real GNI *per capita* and relatively low achievements in various dimensions of economic development.

HL only

18.2 a Answers may include:

- Definition: poverty, sustainability.
- Explanation: of the environmental damage that can be caused by poverty due to overexploitation of scarce resources, such as depletion of soil nutrients in agriculture, deforestation due to the search for new agricultural land, soil erosion due to farming on marginal lands and overgrazing, inability to make improvements in the environment due to poverty.
- Diagram: showing a negative externality.

Chapter 18 has no part (b) **HL only** questions that are examined in Paper 1.

Chapter 19 Barriers to economic growth and economic development

19.1 a Answers may include:

- Definition: infrastructure, economic development.
- Explanation: of the importance of infrastructure to the proper functioning of an economy (roads, ports, telecommunications) as well as in maintaining levels of health (sanitation, sewage, safe water supplies); reference may be made to barriers to infrastructure development; the importance of education, which is both a part of human capital as well as a development goal; reference to education as a merit good with positive consumption externalities; reference may be made to barriers to education.
- Diagram: not necessary for this question, though could include a positive consumption externality diagram.

19.1 b Answers may include:

- Definition: primary sector.
- Explanation: of the risks and obstacles arising for economies highly dependent on a small range of products for export, such as price volatility of primary products, limited access to international markets due to rich country tariff barriers and agricultural subsidies.
- Diagram: not necessary for this question.
- Synthesis (discuss): consideration of the consequences of price volatility of primary products and limited access to rich country markets, such as low export earnings, increased poverty, global inefficiency and resource misallocation, with consequences for the growth and development prospects of developing countries; consideration of the loss of benefits that arise from diversification.
- Examples: real-world examples of countries with high dependence on the primary sector, illustrating consequences.

19.2 a Answers may include:

- Definition: appropriate technology, economic growth, economic development.
- Explanation: of the importance of technology which is appropriate to the factor supplies of a country as well as to its particular climate and ecological conditions; reference may be made to difficulties in developing appropriate technologies.
- Diagram: no diagram is necessary for this question.

19.2 b Answers may include:

- Definition: gender equality, economic development.
- Explanation: of the types of gender inequalities such as in education and health, in the labour market, inheritance rights and property rights, income, wealth, poverty of women.
- Diagram: not necessary for this question.
- Synthesis (discuss): consideration of the consequences for economic growth and development of gender inequalities over and above the well-being of woman and girls such as losses of human capital, losses from huge externalities arising from health and education, losses in the labour market.
- Examples: real-world examples of cases of gender inequalities and their consequences.

> HL only

Chapter 19 has no HL only questions that are examined in Paper 1.

Chapter 20 Strategies to promote economic growth and economic development

Core (SL and HL)

20.1 a Answers may include:

- Definition: import substitution, export promotion, economic growth, economic development.
- Explanation: of import substitution as a growth and trade strategy relying heavily on trade protection measures to limit imports as well as strong government intervention; reference to problems such as inefficiencies and resource misallocation; today import substitution involves mainly selective measures based on the infant industry argument; of export promotion as a growth and trade strategy that relies on strong support of export-oriented industries, also with strong government intervention; of the great success of export promotion strategies.
- Diagram: not necessary for this question.

20.1 b Answers may include:

- Definition: diversification.
- Explanation: of the benefits of diversification, such as sustained increases in exports, development of technological capabilities and skills, reduced vulnerability to primary product price volatility, use of domestically produced primary products to add value to them.
- Diagram: not necessary for this question.
- Synthesis (discuss): consideration of the contribution of diversification to economic growth and development; avoidance of problems arising from excessive specialisation; expansion into manufacturing and services with increased skill and employment opportunities, taking advantage of expansion into higher value-added production.
- Examples: real-world examples of countries that have experienced growth and development through diversification.

20.2 a Answers may include:

- Definition: microfinance, poverty.
- Explanation: of the provision of credit in small amounts to poor people who have no collateral; of the contributions that microfinance makes to poverty alleviation by offering employment opportunities, higher incomes, improvements in human capital formation, improved social status of women.
- Diagram: not necessary for this question; may include a Lorenz curve diagram showing improved income distribution.

20.2 b Answers may include:

- Definition: foreign aid, economic growth, economic development.
- Explanation: that it consists of Official Development Assistance (ODA) and non-governmental organisations (NGOs); distinction between humanitarian aid and development aid; what aid tries to achieve.
- Diagram: not necessary for this question; may use a *PPC* or *AD-AS* diagram to illustrate economic growth.
- Synthesis (evaluate): consideration of advantages of foreign aid such as helping poor people escape the poverty cycle, help to achieve SDGs, help in provision of basic services like health care, education and microfinance, help to provide debt relief; consideration of limitations of aid such as tied aid, conditional aid, aid volatility, insufficient funds for aid, aid may not reach those most in need.
- Examples: real-world examples of countries that have received foreign aid illustrating positive and negative consequences of this.

> HL only

Chapter 20 has no HL only questions that are examined in Paper 1.