

An aerial photograph of a coastal region. A prominent river flows from the top center towards the bottom left. To the right of the river, a road or path runs parallel to the coastline. The water is a deep blue, and the land is a mix of green and brown, indicating vegetation and possibly agricultural fields or urban areas. The overall scene is captured from a high angle, looking down at the landscape.

ECONOMICS WORKBOOK

ANSWERS

Paul Hoang

FOR USE WITH THE I.B. DIPLOMA PROGRAMME

Chapter 1

The Foundations of Economics

Task 1 – Complete the missing words...

finite
supply
infinite
renewable
rational
opportunity cost

1. demand
2. government
3. private, public

1. What
2. How
3. For whom

capital
Land
Labour
Capital
profit
income

Task 2 – Key Terms Quiz

Key Term
Ceteris paribus
Choice
Economic growth
Economics
Enterprise
Finite resources
Opportunity cost
Positive economics
Production possibility curve
Utility

Task 3 – Explain...

a. Economics examines the diverse social behaviours of individuals, firms and countries in the allocation of scarce resources to meet the infinite wants of people in a society.

b. As a social science (not an exact science), it is difficult to hold any variable constant (such as prices, income or weather conditions affecting economic activity). In economics, things are not constant and societies deal with the same problem (such as inflation or unemployment) in different ways – so assumptions have to be made. For example, the concept of *ceteris paribus* allows economists to see what is most likely to happen to the level of demand if one variable affecting demand changes (such as income) whilst holding all other variables (that affect demand) constant.

c. Answers should include the words: Wants, Scarcity, Choice and Opportunity Cost

d. Equity is about fairness, e.g. people who work harder should be rewarded accordingly. This justifies the use of the price mechanism to rationalise the allocation of resources, e.g. pilots are paid more than air stewards due to the relatively higher demand and lower supply of pilots. Equality is about collectivism, i.e. everyone is equal irrespective of their job role.

e. Capital refers to non-natural (manufactured) goods used in the production process. Infrastructure, which is vital for the economic growth and development of society, is therefore considered as capital.

f. Efficiency is about improving output in the economy (the size of the pie) whereas equity is about fairness (how the pie - or share of national output - is divided). The tax system, for example, may not be considered to be equitable by some people, but it is aimed at improving efficiency.

g. By producing an extra 5 producer goods, the opportunity cost is 10 consumer goods. Hence the ratio is 5:10, i.e. the opportunity cost of producing 1 producer good is 2 consumer goods.

h. For each extra 3 kgs of strawberries, the farmer sacrifices 9 kgs of potatoes. This gives a ratio of 3:9, i.e. the opportunity cost of producing 1 kg of strawberries is 3 kgs of potatoes.

Task 4 – True or False?

	True / False
a.	T
b.	F
c.	F
d.	F

e.	F
f.	T
g.	T
h.	T
i.	T
j.	T

Task 5 – Multiple Choice Questions

- C. The creation of government policies
- C. Scarcity
- C. Deciding what ought to be the priority of government policy
- C. The extraction of natural resources
- C. Why production should take place
- B. Unemployment should rise when income taxes are continually raised
- B. How prices are determined in individual markets
- C. The government should aim to improve employment opportunities
- D. Sales revenue
- D. CD of producer goods
- C. remains constant
- C. Division of labour
- C. Point D
- D. Zero opportunity cost
- D. Society wants more than it needs
- C. C. \$200
- A. 1,000 units of Beta
- B. the other projects that could have been produced had the airport not been built
- D. Initiatives in social inclusion
- A. Sustained efforts to promote standards of living

Chapter 2

1.1 Competitive markets – Demand

Task 1 – Complete the missing words...

ability
 quantity demanded
 lower
 price.

- rise, lower
- falls,
- substitutes
- complementary
- satisfaction
- taxes
- boom

necessities
 luxury

normal
 inferior

movement
 increase
 decrease

- Veblen
- rise
- less, more

Higher level
 40.

Task 2 – Plotting demand schedules

The demand curve shows the negative (or inverse) relationship between Price and Quantity demanded at all levels, ceteris paribus.

Task 3 – True or False?

	True/ False
a.	T
b.	T
c.	F
d.	F
e.	T
f.	T
g.	F
h.	T
i.	F
j.	T

Task 4 – Explain...

- A shift in demand is caused by changes in non-price factors that affect demand, e.g. changes in income. A movement along a demand curve is caused by changes in the price of the product
- Such events create problems for both the production and distribution of oil. This shifts the supply to the left and hence leads to an increase in the price of oil.
- It depends! Y and X could be complements (e.g. cars and petrol) or substitutes (e.g. tea and coffee). Alternatively, the products could be unrelated (e.g. clothes and paper).

Task 5 – Diagrams

- a) D shifts right (cod is substitute fish product)
- b) D shifts to the right (demand also becomes more price inelastic at each price level)
- c) This depends if tuna fish are considered an inferior good (in which case more superior meat/fish will be demanded) or a normal good (in which case, quantity demanded will rise). Either way, quantity demanded is affected, not the supply.
- d) D shifts to the left. In the short run, there is unlikely to be any impact as consumers are slow to react to changes in the economy. If unemployment is sustained, then demand for food products, including tuna, is likely to fall.

Task 6 – Multiple Choice

- 1. D. Goods and services tax
- 2. C. An increase in the price and a rise in the quantity traded
- 3. A. Ostentatious consumption
- 4. C. The imposition of a sales tax on all motor vehicles
- 5. B. Effective demand
- 6. D. Applies to all products that are higher in demand during an economic recession
- 7. B. Technological progress
- 8. B. Improved packaging
- 9. B. Price and supply are inversely related
- 10. D. A change in qualifications needed to work in financial services
- 11. A. Anticipation of an increase in gold prices in the near future
- 12. D. Opportunity cost
- 13. B. Income tax rates
- 14. C. Wage rates paid to paper factory workers
- 15. C. A cut in income tax rates
- 16. A. 30 units (HL Only)
- 17. C. \$32.0 (HL Only)
- 18. C. 900 – 60P (HL Only)
- 19. D. $Q_d = 850 - 50P$ (HL Only)
- 20. B. \$1,100 (HL Only)

Chapter 3

1.1 Competitive markets – Supply

Task 1 – Complete the missing words...

ability
higher
price

- profit
- costs

movement
quantity supplied
expands
contracts

shift

price

- right
- supply, left
- merit goods
- competitive supply, joint supply
- rise

Task 2 – Key Terms

Taxes
Supply
Subsidies
Market supply
Law of supply

Task 3 – True or False?

	True / False
a.	T
b.	F
c.	T
d.	T
e.	F
f.	T
g.	T
h.	F
i.	T
j.	F

Task 4 – Explain...

- a. A shift in supply is caused by changes in non-price factors, e.g. taxes, subsidies, adverse weather conditions and time. A movement in supply is caused by changes in prices – a price hike causes an expansion in supply whilst a price reduction causes supply to contract, ceteris paribus.
- b. Bad weather conditions will damage crops and agricultural yields. Hence the supply curve for such products will shift to the left, ceteris paribus.
- c. Higher costs of production; including staff wages and salaries; Adverse weather conditions; Imposition of indirect taxes.

- d. Demand shifts leftwards due to illegal downloads, thereby forcing down the price leading to a contraction in supply.
- e. (*HL Only*) The negative coefficient suggests that firms have to receive a minimum price (above zero) in order to have any incentive to sell. In this particular case, if $P = \$10$, then zero output will be supplied. Any price above \$10 will create a willingness and ability for (some) firms to supply output to the industry.
- f. (*HL Only*) This positive coefficient suggests that even when price is zero, 800 units will be supplied. This suggests that government subsidies might exist to ensure a minimum output is supplied. Alternatively, this might represent the supply of a not-for-profit organization, such as charities, that might be able to operate at a loss due to donations and other sources of funding.

Task 5 – Diagrams

- a) S shifts right (Unit subsidy leads to lower costs, and hence greater supply)
- b) S shifts left (costs of installation leads to increase in costs of production)
- c) S shifts left (taxes reduce supply thereby raising the price)
- d) S shifts left (Higher wages cause an increase in production costs, and hence supply of laptops, *ceteris paribus*)
- e) S is likely to shift to the left (investment tends to fall with rising interest rates because the cost of investment – or business expenditure – falls due to the higher cost of borrowing). Consumption is likely to fall too because households are less likely to take out loans to buy laptops when interest rates are higher.

Task 6 – Multiple Choice

1. C. Subsidies from the government
2. A. Direct taxes
3. B. Technological progress
4. B. Price and supply are inversely related
5. D. Income tax
6. C. A rise in unemployment in the economy will shift the supply curve to the left
7. A. The price of the product
8. D. Higher labour costs in the industry
9. D. Higher wages paid to rice growers
10. B. rise, rise
11. B. A shift in supply from S_1 to S_2
12. B. Changes in taxes and subsidies from the government
13. B. An increase in cocoa prices
14. C. \$20 (*HL Only*)
15. A. $P = 10 + Q$ (*HL Only*)

Chapter 4

1.1 Market equilibrium

Task 1 – Complete the missing words...

- market clearing
- demand
- left
- supply
- price
- i. Price (\$)
- ii. Supply
- iii. Demand
- iv. Quantity traded

Higher Level

- demand
- supply
- \$50
- 100

Task 2 – Key Terms

- Equilibrium
- Equilibrium price
- Excess demand
- Excess supply

Task 3 – True or False?

	True / False
a.	T
b.	F
c.	T
d.	T
e.	T
f.	F
g.	T
h.	T
i.	T

Task 4 – Explain...

- a. Stockpiling would occur, i.e. supply would outweigh demand (excess supply)
- b. A stock-out would occur, i.e. demand would outweigh supply at the lower price (excess demand).
- c. Higher profit margins; Economic (abnormal) profit; Greater market power
- d. Market efficiency; Low/no entry barriers
- e. Firms are not (usually) willing or able to supply at a price of zero. They need to be able to cover their costs of production so will only supply at a price

equal to or above the break-even price. In this case, the break-even price is $P = \$20$.

- f. (HL Only) Government subsidies might enable the firm to supply 300 units even when $P = 0$.

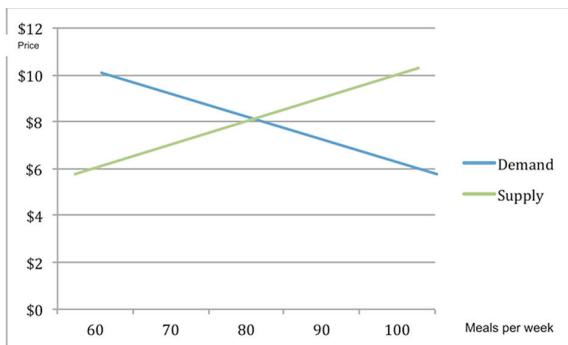
Task 5 – Diagrams

- a. D for cars shifts to the left, ceteris paribus, thereby raising the market price and reducing the quantity traded. The concept of PED might be considered, especially by HL students.
- b. Demand for private transports falls, ceteris paribus, and hence the demand for public transports (the substitute) shifts to the right. Subsequently, there is a rise in price of public transport.
- c. Supply shifts to the left, ceteris paribus. Subsequently, price increases and quantity traded falls (as the higher price contracts supply).

Task 6 – Calculations (HL Only)

- a.
- i.
- $10 = 45 - 5P$
 - $15P = 45$
 - $P = \$3$
- ii.
- $500 - 50P = -300 + 100P$
 - $800 = 150P$
 - $P = \$5.33$

- b.
- i.



- ii.
- $Q_d = a - bP = 160 - 10P$
 - $Q_s = c + dP = 0 + 10P = 10P$
- iii.
- $160 - 10P = 10P$
 - $160 = 20P$
 - $P = \$8$
- Equilibrium quantity traded = $160 - 10(8) = 0 + 10(8)$
 - $160 - 80 = 80$ meals
- iv. Excess supply @ \$9 = 20 meals; excess demand @ \$6 = 40 meals

- c.
- i.
- $680 - 20P = -300 + 15P$
 - $980 = 35P$
 - $P = \$28$
- ii.
- $Q_d = 680 - 20P$
 - $= 680 - 20(28)$
 - $= 120$ units
- Similarly, $Q_s = -300 + 15(28)$
 - $= -300 + 420$
 - $= 120$ units
- iii.
- $Q_d = 680 - 20(20) = 280$
 - $Q_s = -300 + 15(20) = 0$
 - Excess demand = 280 units
- iv.
- $Q_s = -300 + 15(32) = 180$
 - $Q_d = 680 - 20(32) = 40$
 - Excess supply = 140 units

Task 7 – Crossword

¹ O									² L	A	W	O	F	D	³ E	M	⁴ A	N	⁵ D	
⁶ S	U	P	P	⁷ L	Y								Q		D					
T				A						⁸ P		U		V						
E				B						R		I		E						
N				⁹ C	O	N	S	U	M	P	T	I	O	N	L		R			
T				U						C		I		T						
A				¹⁰ S	U	R	P	L	U	S	E		B		S					
T											R									
¹¹ I	N	F	E	R	I	O	R					¹² S	H	I	F	T				
O											U									
¹³ U	T	I	L	I	T	Y				¹⁴ N	O	R	M	A	L					
S																				

Task 8 – Multiple Choice

- B. It exists when there is either excess demand or excess supply
- B. Market price to fall
- A. High prices can be used to limit demand for scarce goods and services
- B. Need for physical contact between buyers and sellers
- B. A rise in the cost of fertilisers
- A. A fall in the price of smartphones
- D. A rise in consumer incomes
- C. A fall in market demand of shampoo
- C. Excess demand
- B. 8,000 units
- A. $P = 29$ and $Q = 300$ (HL Only)
- A. $Qd = 12,000 - 200P$ (HL Only)
- A. $Qs = -2,000 + 400P$ (HL Only)
- C. \$23.33 (HL Only)
- D. 7,334 (HL Only)

	True / False
a.	T
b.	T
c.	T
d.	T
e.	T
f.	T
g.	T
h.	F
i.	F
j.	T

Chapter 5

1.1 Market efficiency

Task 1 – Key Terms

Allocative efficiency
Consumer surplus
Marginal benefit
Marginal cost
Producer surplus

Task 2 – True or False

Task 3 – Multiple Choice

- B. Consumer surplus
- A. Producer surplus plus consumer surplus
- A. Consumer surplus and producer surplus are maximised
- A. A consumer’s marginal utility of consumption being greater than the price paid
- A. \$400
- A. \$400
- A. \$100
- D. Outward shift of the PPF curve
- D. Zero
- D. Points A, B and C

Chapter 6

1.2 Elasticity – Price elasticity of demand (PED)

Task 1 – Key terms

Key Term
Effective demand
Elasticity of demand
Price elastic demand
Price inelastic demand
Unitary elastic demand

Task 2 – Explain...

- a. PED is calculated using the formula: $\%rQd / \%rP$
If $PED > 1$, then the percentage change in demand is larger than the percentage change in price, i.e. demand is said to be price elastic.
If $PED < 1$, then demand is not as responsive to the change in price so demand is said to be price inelastic.
In the rare case that $PED = 1$, then the percentage change in price leads to the exact same percentage change in quantity demanded and so total revenue does not change.
- b. The diagram should show a price inelastic demand curve (one that intersects the x-axis before the y-axis) for a product that lacks substitutes, e.g. oil, tobacco, university and staple foods
- c. Rice is a staple food in China, i.e. a necessity. There are few, if any, real substitutes for the product. Rice also takes up a small proportion of consumers' incomes. Habits/culture also mean that the demand for rice in China is price inelastic.
- d. Such commodities lack substitutes and are essential (necessities) for production so their demand is relatively inelastic to changes in price.
- e. Motor vehicles take up a large proportion of consumers' income and therefore demand is price elastic.

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	T
e.	F
f.	T
g.	T
h.	T
i.	T
j.	T

Task 4 – Calculating Elasticity of Demand

- a. $11.76\% / 16.67\% = 0.7$, i.e. the demand for the watch is price inelastic (customers are not very responsive to the change in price). The fall in price (16.67%) led to a smaller than proportional increase (11.76%) in the quantity demanded.
- b.
 - i. Price is a (key) factor that affects the level of demand, i.e. demand can be sensitive to changes in price (not the other way round).
 - ii. As price goes up, demand will fall – irrespective of whether demand is price elastic or price inelastic (this is the 'law' of demand). With elastic price elasticity, the percentage fall in demand is greater than the percentage rise in price.
- c.
 - i. Qd3 is more price inelastic, intercepting the y-axis at $P = \$200$ and the x-axis at 600 units (whereas Qd2 intercepts the axes at $P = \$150$ and $Q = 600$, and Qd1 intercepts the axes at $P = \$100$ and $Q = 500$ i.e. Qd1 is the most price elastic demand function).
 - ii. The smaller the value of $-b$, the more price inelastic the demand curve.
- d. A demand curve shows the different levels of consumer demand at different price levels, i.e. demand falls as prices rise, ceteris paribus. At higher price levels (on the same linear demand curve), demand falls at a faster rate as (price now accounts for a greater proportion of consumers income). Hence, they eventually seek alternatives so demand is more price elastic at higher prices on the (same/linear) demand curve, vice versa for lower prices.

- e.
i. $P = 600 / 30 = \$20$
- ii. $Q_d = 600 - 30(10) = 300$ CDs per week
- iii. $Q_d = 450 - 30P$
- f.
i. Percentage fall in price is 12.5% so the PED = +20% / -12.5% = - 1.6, i.e. demand is price elastic
- ii. Revenue was $100,000 * \$0.4 = \$40,000$
Revenue rises to $\$120,000 * \$0.35 = \$42,000$
i.e. sales revenue rise by \$20,000 following the price change (due to relatively price elastic demand)

Task 5 – Multiple Choice

1. D. Increase
2. B. Fresh fruit
3. C. There are very few close substitutes
4. D. The price of products in joint demand
5. A. IB textbooks
6. C. Remains constant
7. C. 1.67
8. A. 0.54
9. C. PED falls as demand moves from A to B
10. A. Price inelastic
11. C. $\$40 - (0.25 \times \$40)$
12. D. -1.6
13. B. Price elastic
14. A. \$2,000
15. C. Pizza
16. C. Increase
17. A. \$60,000
18. C. \$121,666.67
19. B. There are very few close substitute products
20. C. 0.5
21. C. Decrease
22. D. Price elasticity of demand for the product is high
23. B. Bananas
24. C. Smaller, price
25. C. $Q_d = 400 - 5P$ (HL Only)

Chapter 7

1.2 Elasticity – Cross price elasticity of demand (CED)

Task 1 – Key terms

Key Term
Complements
Cross price elasticity of demand
Substitutes
Unrelated goods

Task 2 – True or False?

	True/ False
a.	T
b.	F
c.	F
d.	T
e.	T
f.	F
g.	T

Task 3 – Explain why...

- a. The business can use CED to predict the effect on the quantity demanded for their product (and hence sales revenues) if a rival firm changes its price. Other considerations may include the extent to which customers will switch between competing brands and pricing strategies to cope with the increased competition.
- b. The business can use CED to predict the effect on the quantity demanded for a product (and hence its sales revenues) if the price of a complementary good changes. For example, a cinema might want to consider changing the price of cinema tickets and its impact on the sale of popcorn, confectionary and soft drinks at the cinema kiosk. This can affect the cinema's pricing strategy depending on whether the (negative) CED is very high or otherwise.
- c. A rise in the price of private transport will, ceteris paribus, cause a small increase in the demand for public transportation as they are (weak) substitutes – at least in the short run.

Task 4 – Calculating cross price elasticity of demand

- a. $CED = -10\% / -8\% = +1.25$ (strong substitutes)
- b. $CED = 12.5\% / 10\% = +1.25$, i.e. coffee and tea are considered to be strong substitutes
- c. $CED = [9m - 7.92m / 9m] / [\$3.85 - \$3.5 / \$3.5] = -12\% / +10\% = -1.2$, i.e. strong complements

Task 5 – Multiple Choice

1. B. Strong substitute products
2. C. Infinity
3. C. Weak complementary products
4. C. An increase in the price of a complementary good
5. C. Unrelated goods
6. D. Infinity

- 7. A. That product
- 8. A. Fall, demand
- 9. A. Strong substitutes
- 10. D. Infinity
- 11. A. Complements
- 12. C. X and Y are complements
- 13. A. Increase by 9%
- 14. D. -5.0
- 15. D. 0.36

Chapter 8

1.2 Elasticity – Income elasticity of demand (YED)

Task 1 – Key terms

a.

Key Term
Income inelastic demand
Inferior goods
Luxury (superior) goods
Normal goods

b.

	Normal	Inferior		Normal	Inferior
Fresh flowers	✓		Tablet computers	✓	
Haircuts	✓		Public transport		✓
Microwave lunch meals		✓	Staple foods	✓	
No-frills labelled products		✓	Textbooks	✓	
Single-ply tissue paper		✓	Canned fruits and vegetables		✓

Task 2 – Explain why...

- a. Income elasticity looks at how demand changes due to changes in income, rather than changes in price.
- b. As income levels rise (real GDP per capita), people are more likely to switch from public transport (an inferior good) to private transport (a superior good), such as taxis or private cars.
- c. Air travel may be considered by most people as a luxury good, especially as it tends to take up a large proportion of consumers' incomes. However, economy class travel can be (relatively) cheap, especially those offered by low budget airlines. By contrast, only those on high incomes who are willing to pay can travel on business class or first class (superior products).
- d. Normal goods (necessities and luxury products) have a positive YED because consumers will buy more of these items as real incomes increase, *ceteris paribus*.
- e. The negative coefficient of YED suggest the product is an inferior good, i.e. less is bought as real income levels rise. Normal goods have a positive YED value (see question 2d above).

- f. YED is measured by calculating the percentage change in demand following a certain percentage change in income, i.e. $5/10 = +0.5$

Task 3 – True or False?

	True / False
a.	F
b.	F
c.	T
d.	T
e.	T
f.	F
g.	T
h.	T
i.	F
j.	T

Task 4 – Multiple Choice

1. A. Inelastic
2. B. +1.3
3. A. School uniform
4. D. It is an inferior good
5. A. It is a normal good
6. B. A smaller percentage change in the quantity demanded
7. B. Necessities
8. A. Luxuries
9. A. 1 per cent decrease in demand for sausages
10. B. 3.5% rise in demand
11. C. Income elastic at lower income levels and income inelastic at higher income levels
12. D. 12.5%
13. B. Staple foods
14. D. +3.3
15. A. negative, falls

Chapter 9

1.2 Elasticity – Price Elasticity of Supply (PES)

Task 1 – Key terms

Key Term
Perfectly elastic supply
Price elastic supply
Price elasticity of supply
Price inelastic supply

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e.	F
f.	T
g.	T
h.	T
i.	T
j.	F

Task 3 – Explain why...

- a. Supply is a function of time, e.g. fresh fruits and vegetables take time to harvest whereas the production time of computer chips is much shorter. Hence, PES is lower if production time is relatively longer as suppliers cannot easily respond to higher market prices.
- b. Low PES of labour suggests there is a lack of readily available labour, such as in the market for doctors, lawyers and pilots. Hence, wage differentials are used to attract people to these professions. In markets where labour is readily available, such as workers in supermarkets and fast food restaurants, the high PES of labour means it is relatively easy to attract labour without having to pay very high wage rates.
- c. Barriers to entry, both natural (e.g. legislation) and artificial (e.g. brand loyalty) can make it very difficult for new firms to enter the market, thereby limiting the elasticity of supply.

Task 4 – Calculating Elasticity of Supply

- a. $10.52\% / 16.67\% = 0.63$, i.e. the supply of the luxury watch is price inelastic (supply is not very responsive to the change in price). The fall in price (16.67%) led to a smaller than proportional fall (10.52%) in the quantity supplied.
- b.
 - i. Price is a (key) factor that affects the level of supply, i.e. supply can be sensitive to changes in price (not the other way round).
 - ii. Price goes up, supply will rise, ceteris paribus – irrespective of whether supply is price elastic or price inelastic (this is the ‘law’ of supply). With price elastic supply, the percentage rise in supply is greater than the percentage rise in price.
 - iii. The percentage change in supply (the degree of responsiveness) is higher than the percentage change in price, i.e. $PES = 1.5$ so it is actually price elastic.
- c. Percentage change in price = -20% and with a $PES = 1.3$, this means the percentage change in quantity supplied = -26%. Hence, the supply falls to 444 meals per day, ceteris paribus.
- d.
 - i. $Q_s = -140 + 3.5P$ so P must equal $-140/3.5 = \$40$
 - ii. At $P = 50$, the supply is $-140 + 3.5(50) = 35$ units
At $P = 55$, the supply is $-140 + 3.5(54) = 49$ units
Hence $PES = 40\% / 8\% = 5.0$

- iii. At $P = 60$, the original supply is $-140 + 3.5(60) = 70$ units
 At $P = 50$, the new supply is $-140 + 3.5(50) = 35$ units
 Hence, the PES = $100\% / 16.67\% = 5.99$
- iv. Computer components are likely to be massed produced using automated systems, so output can be adjusted quite easily to suit changes in demand (and hence price).

Task 5 – Multiple Choice

1. A. Increase significantly
2. C. There are long time lags in the production process
3. D. Fresh fruit
4. B. Price elastic supply
5. C. Costs of production
6. D. S4
7. D. Any straight line drawn through the origin
8. A. +0.67
9. B. Boeing aircraft
10. C. Long time lag in the production process
11. D. The degree of necessity of the product being supplied
12. A. Coca-Cola soft drinks
13. A. S1
14. C. $400 + 40P$ (HL Only)
15. D. $-60 + 4P$ (HL Only)

Chapter 10

1.3 Government intervention – Taxes and subsidies

Task 1 – Complete the missing words...

minimum
 floor
 supply
 buffer stock
 above,
 lowest

ceiling
 below
 supply

subsidy
 prices
 merit
 cost
 protectionism

taxes
 demerit
 failures
 tariffs

Task 2 – Key Terms

Ad valorem tax
Consumer surplus
Indirect tax
Maximum price
Price floor
Producer surplus
Specific tax
Subsidy
Taxes

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	T
e.	F
f.	T
g.	T
h.	T
i.	F
j.	F

Task 4 – Explain...

- a. Customers may be forced to buy at the higher price due to a shortage (lack of supply), i.e. there is no other place to obtain the product.
- b. A lower (fixed) price than the equilibrium will mean that more is demanded at this price level than producers are willing and able to supply, ceteris paribus. This means that there will be a shortage, i.e. excess demand.
- c. Collect government revenue; Correct market failure (e.g. discourage production and consumption of demerit goods)

- d. To correct market failure in the labour market, e.g. exploitation of low skilled labour; To combat poverty in the economy; To create incentives to work
- e. To ensure food prices are affordable to the general public; To stabilize food prices which would otherwise be subject to external factors such as weather conditions, i.e. favourable weather conditions would generate good yields (supply) and hence lower prices, whilst unfavourable weather conditions could cause prices to rise dramatically.

Task 5 – Calculations

- a.
- i.
- $10 - 4P = 4 + 2P$
 - $6 = 6P$
 - Hence, $P = 1$
 - Substitute this back into $Q_d = 10 - 4(1)$ or $Q_s = 4 + 2(1) = 6$
 - Hence equilibrium price is \$1 and quantity traded = 6 units
- ii.
- When $P = \$2$, $Q_d = 10 - 4(2) = 2$ units
 - When $P = \$2$, $Q_s = 4 + 2(2) = 8$ units
 - Hence, excess supply = $8 - 2 = 6$ units
- iii.
- New supply function is $Q_s = 4 + 2(P-2)$
 - $Q_s^{\text{tax}} = 4 + 2P - 4$
 - $Q_s^{\text{tax}} = 2P$
 - Hence, when $Q_d = Q_s^{\text{tax}}$
 - $10 - 4P = 2P$
 - $10 = 6P$
 - $P = \$1.67$

Task 6 – Multiple Choice

1. D. To encourage the output of products deemed beneficial to society
2. C. Demand for agricultural products is price inelastic
3. B. The supply curve to shift to the left
4. A. The demand curve for most products to shift to the left
5. D. Create incentives to supply
6. B. Excess demand for the product
7. A. A surplus in the output of the product
8. A. Encourage the purchase of electric cars to improve the environment
9. D. Unstable prices
10. A. Producer surplus
11. C. Progressive income tax
12. A. It is ineffective
13. A. Suppliers are guaranteed a higher price than before
14. B. Ad valorem
15. D. To limit the consumption of demerit goods
16. D. a, b, c, d, e, f, g
17. A. h

Questions 18 – 25 (HL Only)

18. A. \$400
19. A. \$200
20. C. \$50
21. C. Demand is price inelastic
22. B. Excess supply of 40,000 units
23. A. \$400,000
24. C. \$7.5
 - Substitute 20 in Qs: $20 = 5 + 2P$
 - $15 = 2P$
 - $P = \$7.5$
25. A. \$1.5
 - $Q_s = 5 + 2(P - 2)$
 - $5 + 2P - 4$
 - $1 + 2P$
 - Hence: $10 - 4P = 1 + 2P$
 - $9 = 6P$
 - $P = \$1.5$

Chapter 11

Market failure

Task 1 – Complete the missing words...

- allocative
- positive
- negative
- Merit
- $MSB > MPB$
- positive
- $MSB = MPB$
- Q^*

- P^*
- positive

- Demerit
- greater

- Q_e
- MPC
- MSC
- higher
- P_e
- gain

- overconsumption
- MPB
- MSC
- loss
- P_e
- cap
- sell

- shifting
- increases
- inelastic

Task 2 – Key Terms

Ad valorem tax
Cap and trade schemes
Common access resource (CAR)
Demerit goods
Externalities
Marginal private benefits
Marginal private costs
Marginal social benefits
Marginal social costs
Merit goods
Negative externality
Pollution permits (or tradeable pollution rights)
Positive externality
Public goods
Social cost

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	T
e.	T
f.	T
g.	F
h.	F
i.	T
j.	F

Task 4 – Explain...

- a. Public goods are non-rivalry in consumption, are non-rejectable and non-excludable whilst merit goods exist when Social benefits > Private benefits of consumption. Not all merit goods are public goods (e.g. private education and private health care) whilst all public goods (e.g. education and training) are merit goods because social benefits of production and consumption exceed private benefits. Public goods (such as national defense) are highly unlikely to be provided by private sector firms due to the free-rider problem, but merit goods (such as education and health care) are often provided by private sector firms.
- b.
 - To encourage consumption (due to the positive externalities associated with merit goods)
 - To overcome the market failures linked to merit goods (underprovision and higher price)
 - Due to equity reasons, especially if the government believes that consumption of merit goods and services should not be based solely on the grounds of ability to pay
 - Due to the longer-term private benefit of consumption (such as education and training) being greater than the shorter-term benefits of consumption
- c.
 - The negative externalities and social costs of consumption are harmful to society, i.e. private costs of consumption are lower than the social costs.
 - Consumers may be unaware of the extent of the negative externalities of these goods (perhaps due to imperfect information about long-term costs).
- d. The tendency for society to overuse (and therefore abuse or overexploit) common resources is known as the tragedy of the commons. The inability of the price mechanism to charge for these common access resources means that there is overuse/depletion/degradation of scarce resources, and hence the market fails to allocate resources efficiently. There is also the issue that such tragedy (of the commons) causes problems for sustainability, a further sign of market failure because such actions result in the degradation, depletion or even destruction of the common resource to the detriment of society.
- e. Fossil fuels, such as coal, natural gas and petroleum, are formed by natural processes that can take millions of years to generate. Hence, economic activity depletes these scarce non-renewable resources, thus posing a threat to sustainable growth.
- f. Advantages include: economic equity and equality of provision of public goods for all; private sector firms, driven by profit maximization, may have little, if any, incentive to provide such goods; many public goods would simply not be available if it were not for government provision.

Disadvantages include: opportunity costs of direct government provision; potential government failure from intervening in markets (do governments necessarily know best?); contracting the work to private sector firms may prove to be more efficient.

- g. Due to the lack of competition, the profit-maximising monopolist is likely to supply less and therefore charge more than would otherwise be the case. The underprovision and resulting welfare loss means the free market fails to clear at the socially optimum level of output.

Task 5 – Multiple Choice

1. D. Government funded schools
2. D. Fossil fuels
3. B. They are provided by the government as private firms have no incentive to do so
4. D. It can help to internalize negative externalities of economic activity
5. C. Benefit free-riders
6. B. They both have positive externalities of consumption
7. B. The existence of free-riders who benefit from consumption without having to pay
8. C. Marginal social benefits equal marginal social costs
9. C. Have rivalry or excludability
10. A. It does not receive any payment for the external benefit that is generated
11. D. National defense
12. B. Only public goods are non-excludable
13. A. Tragedy of the commons
14. D. Non-rivalry
15. C. Encourage firms to invest in pollution-reducing technologies
16. D. Increase the opportunity cost to firms that pollute
17. A. Public goods
18. A. External costs and benefits
19. C. Legislation
20. D. Tradable permits
21. A. The diffusion of renewable energy
22. A. Pollution permits
23. A. The over-exploitation of land for agricultural use leads to negative externalities
24. D. Expansion of road networks in major cities to relieve traffic congestion
25. B. Crime
26. A. Taxes and subsidies
27. C. Asymmetric information (*HL Only*)
28. C. Market failure and inefficiencies (*HL Only*)
29. D. Fresh fruits and vegetables (*HL Only*)
30. D. Provision of common access resources (*HL Only*)

Chapter 12

1.5 Theory of the firm – Costs, Revenues and Profits (*HL Only*)

Task 1 – Costs Vocabulary Quiz

Key Term
Average product
Corporate social responsibility
Diminishing returns
Fixed costs
Long run
Marginal product
Profit maximization
Revenue
Short run
Supernormal profit
Total costs
Total product
Unit costs
Variable costs

Task 2 – True or False?

	True / False
a.	T
b.	F
c.	T
d.	F
e.	F
f.	F
g.	F
h.	T
i.	T
j.	T
k.	T

Task 3 – Economies and Diseconomies of Scale

- a. There are relatively higher barriers to entry in the pharmaceutical trade, e.g. licensing, set-up costs, R&D, patents and government restrictions.
 - b. Traffic congestion; escalating rents; higher market wage rates due to labour shortages...
 - c. At 200 units, $AC = 5,000/200 = \$25$
At 300 units, $AC = 6,000/300 = \$20$
Therefore, the firm has experienced economies of scale, i.e. lower unit costs following an increase in the level of output.
1. C. Enjoy economies of scale
 2. A. The exercise of control by managers being weakened with a larger workforce
 3. C. There is sufficient market demand for the product
 4. A. Industry, location
 5. C. Generate lower unit costs
 6. B. Economies of scope
 7. A. Internal diseconomies of scale
 8. C. Specialised back-up services available in a particular region
 9. C. Diseconomies of scale
 10. D. Late deliveries due to congestion in busy locations

Task 4 – Calculations

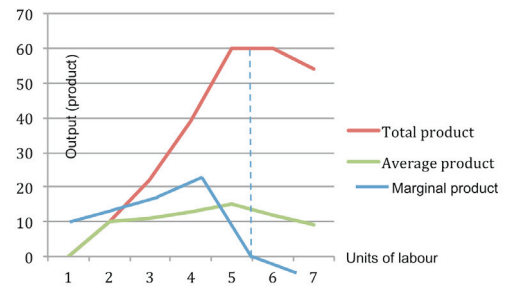
- a.
 - i. $(15 * 200) + 500 = \$3,500$
 - ii. $(\$35 * 200) - \$3,500 = \$3,500$
 - iii. Sales are higher at 200 units so the fixed costs are spread over more units (hence AC fall from \$20 to \$17.5). This means that the firm has experienced economies of scale, i.e. falling AC as output increases.
- b.
 - i. $[(\$2 * 3,000) + \$3,000] / 3,000 = \$3$
 - ii. Profit = $[(\$6 - \$2) * 3,500] - \$3,000 = \$11,000$
 - c.
 - i. TVC = $\$5 * 2,000 = \$10,000$
TFC = \$5,500
Hence, TC = \$15,500
 - ii. TR = $\$15 * 2,000 = \$30,000$
Hence, profit = $\$30,000 - \$15,500 = \$14,500$
 - d.
 - i. \$2,000
 - ii. It falls from \$50 per unit ($\$5,000 \div 100$) to just \$36.67 ($\$11,000 \div 300$), i.e. it experiences economies of scale.
 - iii. Average costs = \$40 ($\$8,000 \div 200$) so the price must be 150% higher, i.e. set at \$100

- e. As $AC = \$80$ and $AFC = \$30$, then $AVC = \$50$
 $TVC / AVC = Q$, i.e. $\$8,000 / \$50 = 160$ units

f.
i.

Units of labour	Average product	Total product	Marginal product
0	-	0	
1	10	10	10
2	11	22	12
3	13	39	17
4	15	60	21
5	12	60	0
6	9	54	-6

ii.



- iii. Total product is maximised with the 5th unit of labour, i.e. where marginal product is zero.

Task 5 – Explain ...

- a. Fixed costs, such as rent and advertising, do not change with the level of output. By contrast, variable costs (such as wages and commission) continually rise with greater levels of output.
- b. The fixed costs are spread over an increasingly larger level of output and hence the average fixed costs must fall.
- c. Whilst both lead to higher unit costs of production, DMR occur in the short run, when at least one factor of production is fixed in supply. DRS occur in the long run when all factors of production are variable.
- d. Explicit costs are the accounting costs related to output or production, such as raw material costs, wages and rent. Implicit costs include the opportunity costs of the output/production, such as foregone income from the best alternative or opportunity.
- e. Zero economic profit means that total revenue covers all economic costs (both implicit plus explicit costs), so the firm still earns normal profit – enough to keep factors of production in their current use.
- f. Output per worker with 20 people = $250/20 = 12.5$ units
Marginal output of 21st worker $10/1 = 10$ units, i.e. productivity has fallen

- g. When marginal product (MP) is positive, then the total product (TP) will rise. Likewise, then MP is negative, the TP will fall. Hence, TP must be maximized when MP = zero.
- h. IRS is a long run phenomenon and occur when increasing the use of all factors of production by a given number (such as doubling the use of all inputs) leads to output increasing by a larger factor (such as a 150% increase in output), in the long run.

Task 6 – Cost and Revenue Formulae

Type of Cost / Revenue
Average cost
Average revenue (or Price)
Marginal cost
Marginal revenue
Total cost
Total revenue

Task 7 – Costs, Revenues and Profits Multiple Choice

1. A. Fixed costs
2. A. There is at least one factor input fixed in supply
3. B. Waiting staff wages
4. D. \$2,345
5. B. \$1.5
6. A. Variable costs
7. B. Quantity
8. C. Insurance costs
9. B. Falling too but at a faster rate
10. D. Average Fixed Costs
11. B. Costs that are static in the short run
12. B. Marginal revenue
13. B. A fall in the marginal product as the quantity factor inputs rises
14. A. Average fixed costs
15. B. Total variable costs
16. C. Average cost
17. A. Sponsorship of Arsenal Football Club
18. B. \$4
19. C. 50%
20. A. Increase output
21. B. Normal
22. D. Cover all costs, both economic and implicit, from its revenue
23. C. $MC = MR$
24. D. Cost minimisation
25. D. Normal profit
26. C. Normal
27. D. Total revenue exceeds total economic costs
28. D. All of the above
29. C. Total costs
30. B. Diminishing returns eventually set in, thereby causing the LRAS curve to rise

Chapter 13

Theory of the firm – Perfect Competition (HL only)

Task 1 – Complete the missing words

- competition
- many
- takers
- knowledge
- homogeneous
- elastic
- price
- loss
- productively
- allocatively
- horizontal

- average
- marginal
- lowest
- \$3
- normal
- fixed
- variable
- average variable costs
- more
- lower
- demand
- supply
- EFGH
- EFGH
- normal
- left
- abnormal
- normal
- maximisers

Task 2 - True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e.	T
f.	T
g.	F
h.	T
i.	T

Task 3 – Multiple Choice

1. A. Firms are price takers
2. A. As no single firm has market power, any change in output by the firm will have no effect on the market price
3. C. Consumers have brand loyalty
4. D. Firms producing at the point where MC = MR
5. A. Attract new entrants into the industry
6. B. More of one product can only be produced if less of another product is produced
7. D. Firms earn abnormal profits, thereby covering the opportunity cost of production
8. D. Occurs when the price mechanism allocates resources to their best use
9. A. The use of the least-cost method of output
10. C. Assumes some markets have very low, if any, barriers to entry

Chapter 14

Theory of the firm – Monopoly (HL only)

Task 1 – Complete the missing words...

monopoly
 producer
 higher
 lower
 barriers to entry
 intellectual property rights
 supply
 demand

economies of scale
 Research and Development
 productive
 makers
 $P = MC$
 lower
 higher
 100%
 public
 one
 wasteful

MC
 Q_{pm}
 P_{pm}
 a and b
 zero
 P_{rm}
 Q_{rm}
 b and c
 supernormal
 price
 share (or dominance)

Task 2 – Explain...

- a. In its pursuit for profit maximization, the monopolist can restrict output and/or charge a higher price thereby creating a loss in economic/social welfare.
- b. High barriers to entry; Limited, if any, competition; Price inelastic demand; No substitute goods; Price makers; Imperfect knowledge
- c. Higher price, but lower output; Loss of consumer surplus; Potential deadweight loss; Less incentive to innovate.
- d. Economies of scale and therefore cost savings; Natural monopolies eliminate wasteful competition; Provision of public goods and merit goods; Abnormal profits can help to fund innovation and Research and Development; Market power can be a source of international competitive advantage for the domestic firm.

Task 3 – True or False?

	True / False
a.	T
b.	F
c.	T
d.	T
e.	T
f.	F
g.	T
h.	T
i.	F
j.	T

Task 4 – Multiple Choice

1. C. Productive efficiency
2. A. Equal to one (unitary)
3. B. There are very high or extreme barriers to entry
4. D. The existence of abnormal profits
5. A. Postal service
6. D. Loss-making services
7. D. 10,000
8. B. Be able to increase its sales revenues but not its market share
9. D. Allocative inefficiency
10. A. Long-run average costs decline continuously
11. C. Only one supplier of a product
12. D. There is productive efficiency in the long run
13. B. Faces a downward sloping demand curve
14. D. Marginal revenue is less than price

- 15. C. Total revenue increases when marginal revenue is positive but falls when the marginal revenue becomes negative
- 16. D. \$6
- 17. D. \$7
- 18. B. \$3.50
 $(10 * \$9) - (11 * \$8.50) = \$3.50$
- 19. B. Equal to or less than \$4.10
 $(8 * \$5 = \$40)$ from $(9 * \$4.9 = \$44.10) =$
 \$4.10 marginal revenue, so marginal cost cannot exceed this amount
- 20. C. Earns abnormal profit by increasing its output
- 21. C. 0a
- 22. A. abcd
- 23. A. 0g
- 24. B. 0h
- 25. B. 0bdg

Chapter 15

Theory of the firm – Monopolistic Competition (HL only)

Task 1 – Complete the missing words

small
 market
 barriers
 differentiated

non-price
 brand
 demand
 elastic

average
 loss
 costs
 revenue

abnormal
 lower
 normal

monopoly
 output
 differentiated

Task 2 – Explain...

- a. Product differentiation means products are not homogeneous so firms have some degree of market power, i.e. price setting ability. Hence, their demand curve is not horizontal (unlike for price takers).
- b. Branding, Advertising, After-sales care (e.g. guarantees / warranties or delivery service), Customer service, Packaging, and Product developments (e.g. limited editions or special features).

- c. Market power exists (to some extent) in monopolistic competition; Firms in perfect competition are productively efficient and allocatively efficient; there are many more producers under perfect competition; Some economies of scale can be enjoyed by monopolistically competitive firms; Barriers to entry/exit non-existent under perfect competition; Larger sized firms in monopolistic competition; Product differentiation under monopolistic competition compared to homogeneous output in perfect competition.
- d. Much weaker market power under monopolistic competition; Both are inefficient, but natural monopolists eliminate wasteful competition; Much larger number of producers under monopolistic competition; Huge economies of scale for the monopolist; Extreme barriers to entry/exit; Many small sized firms in monopolistic competition; Product differentiation exists under monopolistic competition but not necessarily under monopoly; Supernormal profits exist only for the monopolist in the long run.

Task 4 - True or False?

	True / False
a.	T
b.	T
c.	F
d.	F
e.	T
f.	T
g.	T
h.	T
i.	T

Task 5 – Multiple Choice

- 1. B. Productively efficient in the long run
- 2. A. a larger the number of firms in the industry
- 3. B. Firms make normal profits in the long run
- 4. A. Demand more price inelastic
- 5. B. A large number of competing firms produce differentiated products
- 6. D. \$10
- 7. B. Mutual interdependence
- 8. C. Firms will engage in non-price competition
- 9. A. H&M (clothing)

- 10. D. Above its marginal cost \$20
- 11. D. Equal to its average total cost \$30
- 12. C. $MC = MR$ low
- 13. C. Firms operate at full capacity in the long run B
- 14. C. Products can be homogeneous or differentiated in monopolistically competitive markets D
- 15. B. can be positive (supernormal), negative (loss) or zero (normal) A
- 16. D. They are neither productively efficient or allocatively efficient \$5
- 17. B. 0b
- 18. B. 0f
- 19. C. A per unit profit of bc
- 20. B. Firms will enter the industry, thereby forcing down the price

Chapter 16

1.5 Theory of the firm – Oligopoly (HL only)

Task 1 – Complete the missing words...

concentration
 Homogeneous
 differentiated
 interdependence
 trade practices
 economic

Concentration
 power
 75%

$$(4 * 15^2) + (10 * 4^2) = 1,060$$

$$(25^2 + 20^2 + 10^2 + 5^2) + (10 * 4^2) = 1,310$$

more
 B
 A

Collusive
 cartel
 Tacit collusion
 informal

non-collusive
 price war

MR
 0b
 0a
 abnormal
 0a
 0c
 0d

non-price
 Differentiated
 identical (undifferentiated)

Game
 two
 Dilemma

Task 2 – Vocabulary Quiz

Key term
Cartel
Collusion
Concentration ratio
Game theory
Kinked demand curve
Limit pricing (accept Predatory pricing)
Non-price competition
Tacit (informal) collusion

Task 3 – Explain...

- a. Branding; After-sale care (e.g. free delivery service, guarantees and warranties); Added-value services (e.g. on-demand TV channels on certain airlines, longer opening hours at certain supermarkets, loyalty schemes); Quality; Level of customer service; Perceived value for money.
- b. Setting minimum prices; market sharing agreements; discriminatory pricing; refusal to supply firms that stock the products of their competitors; exclusive dealings; predatory pricing; limit pricing.
- c. A few large firms dominate the industry (high market concentration); high barriers to entry; non-price competition; price rigidity; homogeneous or differentiated products; imperfect information; interdependence.
- d. Game theory; Profit maximising behaviour; Ultimately, the firms are still rivals so there is a tendency to cheat/compete.
- e. This means that the largest four firms in the industry account for 83% of the sales turnover in that industry. Hence the industry is dominated by these three large oligopolists operating in a highly concentrated industry.
- f. Branding and advertising can help to expand sales such that oligopolists achieve substantial economies of scale (productive efficiency gains); They can

create inefficiencies if branding and advertising
create artificial barriers to entry / greater brand
loyalty and therefore greater monopoly power.

Task 4 - True or False?

	True / False
a.	T
b.	T
c.	F
d.	T
e.	T
f.	T
g.	T
h.	F
i.	T
j.	T

Task 5 – Multiple Choice

- A. A small number of firms
- D. Whether products are homogenous and/or differentiated
- C. The concentration ratio is higher in industry B than in industry A
- C. A small number of firms dominate the industry
- D. Price competition
- C. Rival firms do not follow if price is increased
- A. Identify how the initial price was determined
- B. Collusion
- B. Consider the actions of competitors before deciding on their strategy
- D. There are high entry barriers
- D. Products can be standardised or differentiated
- D. A small number of firms produce a large proportion of the output in the industry
- A. Commercial banking
- B. Greater market power in industry Y than in industry X
- C. 2,500
- B. 90 per cent
- D. 2,250
- B. Competitors will follow a price cut but will overlook a price increase
- C. Non-collusive oligopoly
- A. Minimise competition between member firms of the cartel
- B. The cost and revenue curves of rivals are very similar
- B. Of
- A. 0a
- A. ab
- C. cd

Chapter 17

Theory of the firm – Price discrimination (HL only)

Task 1 – Complete the missing words...

Price discrimination
price differentiation

maker
monopoly (or market)
price elasticities of demand
separation
First
Second
Third
price
zero/low
higher
lower

Task 2 – Explain why...

- Price discrimination takes place when different customers pay different prices for essentially the same product provided by a firm, e.g. child and adult air fares. First class air travel (unlike economy class travel) is a premium service so customers pay a premium price – therefore this is not price discrimination.
- Family tickets; Adult versus Child ticket prices; Annual passes; Discount ticket prices for student tickets, old-age pensioners and the unemployed; Weekday versus weekend ticket prices; Summer versus winter ticket prices.

Task 3 - True or False?

	True / False
a.	T
b.	T
c.	F
d.	F
e.	T
f.	T
g.	T
h.	T
i.	F
j.	T

Task 5 – Multiple Choice

1. A. First degree price discrimination
2. B. Price is based on the maximum amount that individuals are willing to pay
3. A. Different buyers with different demand elasticities that purchase different quantities of a product
4. D. ‘Happy hour’ discounts at bars and restaurants
5. B. Family tickets at theme parks
6. A. Different buyers with different demand elasticities paying different prices
7. D. Competitive markets are more efficient than monopolist ones
8. B. Second degree price discrimination

9. A. A higher price in market A
10. B. $MR_A = MR_B = MC$

Chapter 18

Economic activity

Task 1 – Crossword: Economic Activity ...

¹ C	² I	R	C	U	L	A	R	F	L	O	W	O	F	I	N	C	³ O	M	E		⁴ G		
	N																P				D		
	V		⁵ G		⁶ R									⁸ G	R	E	E	N	G	D	P		
	E		⁹ I	N	J	E	C	T	I	O	N						N						
	S		P			N					¹⁰ T	A	X	E	S		¹¹ E	X	P	O	R	T	S
	T					T					E						C						
	M		¹² S				¹³ R			¹⁴ P	R	O	F	I	T		O						¹⁵ C
¹⁶ L	E	A	K	A	G	E		E			E						¹⁷ N	O	M	I	N	A	L
	N			V			¹⁸ W	A	G	E	S						O						O
	T			I			L				T			¹⁹ G		²⁰ I	M	P	O	R	T	S	
				N										N			Y						E
				²¹ G	D	P	P	E	R	C	A	P	I	T	A								D

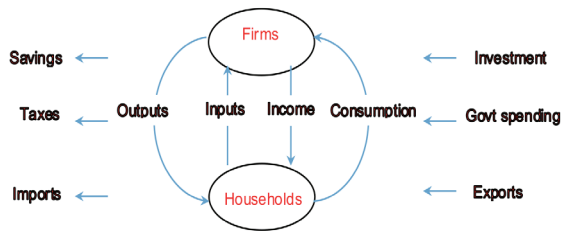
Task 2 – Explain...

- a. The GNI, similar to aggregate demand, consists of C (personal consumption expenditure), I (private investment), G (government expenditure), and X – M (net exports of goods and services). However, it also includes net income from assets abroad. However, unlike GNP, GNI deducts indirect business taxes from the calculations (to make international comparisons of national output more meaningful).
- b. A person’s standard of living is directly dependent upon the amount of goods and services that s/he is able to consume. Hence, national income statistics, which represent the level of economic activity, will directly affect people’s wellbeing.
- c. Savings, Taxes and Import expenditure are all leakages as money leaves the circular flow to banks, government and the foreign sector respectively.
- d. Government spending, export earnings and investment expenditure are all injections as money enters the circular flow thereby fuelling economic activity.

- e. Each of these methods of calculating economic activity should give the same result because they measure essentially the same thing, i.e. a flow of income and expenditure over a period of time. This is because the value of national output equals what is spent on the output (national expenditure). Also, what is spent on the output becomes (national) income to households and firm who have produced the output.
- f. When comparing GDP figures over time and/or between countries to gauge the level of standards of living, there is a need to consider:
 - How the GDP is distributed (income and wealth distribution)
 - Varying rates of tax (both direct and indirect taxes)
 - The costs of living, e.g. housing, education and basic amenities
 - The purchasing power of money over time and across countries
 - The degree of social/welfare benefits in the country
 - The problem of comparing GDP figures expressed in different currencies over time

- The composition of national output, such as North Korea's heavy expenditure armaments or the UK's huge spending on welfare benefits
- The extent to which national output has generated negative externalities, thereby constraining sustainability and the quality of life
- Life expectancy
- Percentage of population with access to basic amenities, such as clean water
- The size of the unofficial economy (for goods and services that are not traded, such as home-grown fruits and vegetables and bartered services)
- Alternative measures of GDP as a measure of living standards, , such as the Human Development Index

g.



In an open economy, there is a foreign sector with international trade. Export earnings (X) represent an injection to the circular flow, whereas import expenditure (M) represents a leakage. With a government sector, taxes (T) represent a withdrawal, whereas government spending (G) are an injection. With the financial sector included, savings (S) represent a withdrawal whilst investments (I) are injections. In summary, the injections in this model are I, G, and X whereas the withdrawals are S, T and M. The circular flow will change based on the relatively size of all withdrawals ($W = S + T + M$) and all injections ($J = G + X + I$).

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	T
e.	T
f. This applies to nominal, not real, GDP	F
g.	T
h.	T
i.	T

j.	T
k.	T

Task 4 – Multiple Choice

1. A. Income
2. D. Investment expenditure
3. C. Per capita GDP and per capita GNP account for the size of the population
4. D. Tax revenues
5. D. Net national income from abroad
6. B. Increased consumption of imported products
7. A. Interest rates
8. A. Nominal GDP is measured in current market prices while real GDP takes account of fluctuations in prices over time
9. B. Factor resources; factor incomes
10. B. Household expenditure; goods and services
11. B. The sum of investment (I), government expenditure (G) and net export spending ($X - M$)
12. C. Government spending on public sector pay
13. A. GDP measures the flow of output produced within the country
14. B. Nominal GDP
15. A. current, constant
16. A. factors of production; factor incomes
17. A. Households spend all their income on the goods and services produced by firms
18. C. Exports and Government spending
19. D. The following condition holds: $S = I$ This only holds true in a closed economy model with a financial sector
20. A. Withdrawals and injections
21. B. Increased by 2% (HL Only)
22. C. \$18,750 i.e. $24,000 / (128/100) = 18,750$ (HL Only)
23. B. \$281bn (HL Only)
24. B. \$121bn GNP = GDP + Net income property from abroad (HL Only)
25. C. \$121.91bn (HL Only)

Year	Nominal GDP (\$bn)	GDP deflator	Real GDP (\$bn)
2011	128.0	105.0	121.90
2012	130.2	106.8	121.91
2013	132.4	109.6	120.80

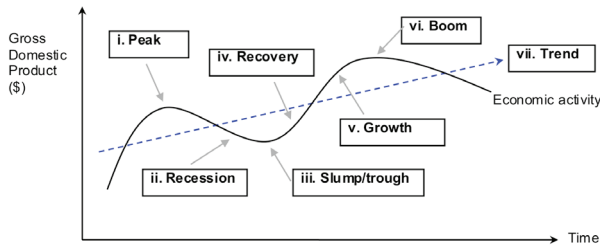
Chapter 19

The business cycle

Task 1 – Complete the missing words...

- gross domestic product
- business
- consumption (or consumer expenditure)
- investment

two
income
unemployment
recovery
growth



Task 2 - True or False?

	True / False
a.	F
b.	T
c.	T
d.	F
e.	F
f.	T
g.	T
h.	T

Task 3 - Multiple Choice

- B. The long term trend of the business cycle
- D. A negative change in the rate of economic activity
- A. It creates uncertainty for business and consumer confidence levels
- C. Lower rate of unemployment
- D. The projected growth rate if resources are fully and efficiently employed
- A. A fall in GDP results in a recession whereas a fall in GDP growth means the economy is still growing
- A. GDP rises
- C. Potential growth
- D. Diseconomies of scale in production
- D. The level of aggregate demand

Chapter 20

Aggregate Demand

Task 1 - Vocabulary Quiz

Key term
Consumption
Disposable income
Government spending

Investment
Net exports

Task 2 - Explain...

- Aggregate demand is the planned/expected expenditure, comprising of Consumption expenditure, Investment expenditure, Government spending and Net exports (the sum of exports minus imports).
- AD has an inverse relationship with the general (average) price level, i.e. there is less aggregate demand at higher prices, vice versa; Higher prices reduce the wealth of the nation (including savings) so firms, households and the government spend less; Higher prices result in higher interest rates which negatively affect AD (see Question 2d); Higher prices make net exports decline since exports become relatively less attractive for overseas buyers.
- Higher interest rates tend to: lower consumption (as households have lower discretion income); reduce investment (as the cost of borrowing increases); reduces government spending (as government indebtedness rises); lowers net exports (the subsequent rise in the exchange rates tends to reduce the demand for exports and raise the demand for imports).
- Business confidence levels; Interest rates (high interest rates tend to deter investment spending); Phase in the business cycle (investment is likely to take place during a recession); Cost of investment, including the exchange rate if suppliers/partners are overseas; Spare capacity in the economy; Corporation tax rates; Level and intensity of both domestic and international competition.
- Business confidence levels; Changes in interest rates; Changes to business indebtedness; Changes in income tax rates; Changes in corporation tax rates; Changes to government spending based on economic and political priorities (e.g. austerity measure to combat a global financial crisis); Changes to the income of major trading partners (especially those in the same trading bloc); Exchange rate fluctuations; Changes to the level and intensity of protectionist measures.

Task 3 - True or False?

	True / False
a.	F
b.	T
c.	T
d.	T
e.	F
f.	F
g.	T

h.	T
i.	T
j.	F

Task 4 – Multiple Choice

- D. Real national output that is purchased at each price level, per time period
- B. Shift the aggregate demand curve
- A. Its aggregate demand curve would shift to the right
- C. A change in the general price level
- C. Discourage consumption expenditure
- C. The total value of all goods and services demanded in the economy
- B. Low
- C. Government spending
- A. Investment expenditure
- C. Net exports will increase
- A. National output increases at all price levels
- A. Consumption expenditure falls
- D. It shifts to the right
- C. Government spending
- D. Business confidence levels

Chapter 21

Aggregate Supply

Task 1 – Complete the missing words...

long
 short
 shift
 SRAS₃
 SRAS₂
 lower
 vertical
 higher

Task 2 – Explain...

- Quantity and quality of factors of production; Costs of production; State of technology; Education and training; Corporation tax structure; Productivity; Labour mobility (occupational and geographical).
- Changes in resource prices (e.g. wage rates and rents), Changes in business tax rates; Subsidies; Supply-side shocks (e.g. war, devastating natural disasters and oil shortages).
- Spare capacity (during a recession, for example) and 'sticky' wages mean that the price level is stable during the Keynesian range even if national output falls
 - Production bottlenecks, such as labour shortages, take place during the intermediate range along the

AS curve thereby causing prices to rise as national output increases

- At full employment (Y_f), producers compete for limited resources thereby pushing up the general price level especially as the economy cannot produce beyond full employment.
- The LRAS is vertical at the level of full employment because LRAS is independent of the price level. It is, instead, dependent on non-price factors such as changes to the quantity and quality of factors of production. A change in the price level, caused by changes in aggregate demand, merely causes a movement along the LRAS curve.
 - Even when aggregate demand declines, many firms may reduce employment rather than wage rates because wage cuts can reduce both worker morale and work effort, and therefore lower productivity. Existing employment and wage contracts can also prevent wages from falling. In addition, workers (and their labour unions) get 'used to' a certain wage and are inflexible in accepting pay cuts. Finally, it is not possible, of course, to cut wages below the national minimum rate.

Task 3 - True or False?

	True / False
a.	T
b.	T
c.	T
d.	T
e.	T
f.	F
g.	F
h.	T
i.	T
j.	F

Task 4 – Multiple Choice

- C. Upwards sloping from left to right
- D. Education and training reforms
- B. Higher prices of imported resources
- D. Labour productivity
- D. The inflation rate of the economy
- A. Domestic inflation rates
- A. External diseconomies of scale
- B. Wages are sticky downwards, i.e. workers are not receptive of a cut in their pay
- D. Nominal wage rates and other factor resource prices are unresponsive to changes in the price level
- C. Shift the long run aggregate supply curve to the right

Chapter 22

Equilibrium AD-AS

Task 1 – Complete the missing words...

national output
lower
lower

market
expansionary
full
frictional
voluntary

potential
inflationary

temporary
market

P_1
expanding
higher
increases

shift
fall
recessionary

demand
supply

Task 2 – Explain...

- a. The increase in net exports will shift the aggregate demand curve rightward, ceteris paribus. Although this increases national output, the impact on the general price level is dependent on the shape of the aggregate supply curve.
- b. The fall in share prices and business confidence will have an impact on investment spending, therefore shifting AS to the left. At the same time, the fall in consumer confidence will shift AD to the left. Hence, both national output and price levels are likely to fall.
- c. Deflationary gap because the real national output equilibrium in the short run (P_e and Y_e) is below the potential output at full employment (Y_f). The government could choose to use expansionary fiscal and/or monetary policy to boost aggregate demand to match long run aggregate supply, thereby closing the deflationary (recessionary) gap.
- d. ‘Sticky’ in economics describes a situation in which a variable is resistant to change, thereby reducing the effectiveness of market forces. Sticky downwards therefore means that wages can move up with ease (who wouldn’t accept a pay rise?!) whilst

workers will resist any attempt to have their wages reduced, even if this is in the best interest of the workforce in the long run. The result is inflationary without any corresponding increase in output, so it can leave the economy in a recessionary (output) gap.

Task 3 – True or False?

	True / False
a.	F
b.	T
c.	T
d.	T
e. This occurs when both AD and AS increase	T
f. Inflationary gap	F
g.	F
h.	T
i.	T
j.	F

Task 4 – Multiple Choice

- 1. B. Aggregate demand rises and aggregate supply rises
- 2. B. Aggregate supply is price inelastic
- 3. A. Reduce the general price level and increase real national income
- 4. C. Improved training opportunities for all employees
- 5. B. Aggregate supply shifts right
- 6. C. 200
- 7. C. A shortage of real national output of \$150bn
- 8. B. Equilibrium price level falls to 150 and real national output would be \$350bn
- 9. B. Increase the price level but not national output
- 10. B. Aggregate supply shifts right
- 11. B. Deficit of \$4bn
- 12. C. \$41 billion This is where $AD = AS$, i.e. $24 + 8 + 9 + 8 - 8 = 41$
- 13. D. 116 AD at price index of 116 = $26 + 10 + 11 + 9 - 7 = \$49bn$
- 14. D. 116 AS at price index of 116 would increase from \$41bn to \$49bn, which matches AD at this price level: $26 + 10 + 11 + 9 - 7 = \$49bn$
- 15. B. \$6 billion At $AD = \$33bn$, the price index is 124 where $I = \$6bn$

Chapter 23

The Keynesian Multiplier (HL Only)

Task 1 – Matching exercise

1, d
2, e
3, f
4, a
5, c
6, h
7, b
8, g

Task 2 – Calculations and explanations...

- a. $£9.3 * 1 / (1 - 0.7) = £31m$
- b. $ΔG * [1 / (1 - MPC)] = 15 * (1 - 0.8) = $3bn$
- c. $ΔGDP = ΔT * [MPC / (1 - MPC)] = 20 * (0.75/0.25) = $60bn$ total withdrawal from the economy
- d. $ΔGDP = ΔT * [MPC / (1 - MPC)] = 300 * (0.7/0.3) = $700m$ decrease in GDP
- e. The multiplier shows the degree to which each dollar spent by the government (or households or firms) can raise aggregate demand by more than a dollar – due to the multiplier effect. Hence, this can aid government fiscal policy (government spending and taxation policy).
- f. If the economy is on the flat section of the SRAS curve (i.e. there is mass unemployment), the multiplier would increase national output (thereby reducing unemployment) without much, if any, increase in the general price level. By contrast, if the economy is on the vertical section of the (long run) AS curve, with the economy operating at the full employment level, the multiplier will be no impact on national income change, but there will be an increase in the general price level. If the economy operates on the upwards sloping section of the AS curve, the multiplier effect will impact on both national output and price levels.

Task 3 – True or False?

	True / False
a.	F
b.	T

c.	F
d.	T
e. They will spend an extra \$0.6	F
f.	F
g. $\$12bn / 1 - 0.35 = \$34.28bn$	T
h.	T
i.	T
j. It will diminish if inflation occurs	F
k.	T

Task 4 – Multiple Choice

1. D. Consumption expenditure
2. D. Marginal propensity to invest
3. C. The extra household spending from each extra dollar of income earned
4. C. Increase the size of the multiplier
5. A. Decline
6. C. The value of the average propensity to consume will converge with the value of the marginal propensity to consume
7. D. The larger the value of the withdrawals, the larger the value of the multiplier No, it is the other way round the smaller the value of the withdrawals (hence the larger the value of the MPC) the larger is the value of the multiplier)
8. D. $\$26.67bn$ ($\$8bn / 1 - 0.7 = \$26.67bn$)
9. B. $+\$70m$ [$\$30m * [(MPC / (1 - MPC)) = 30 * (0.7/0.3)] = +\$70m$]
10. A. $\$8.75bn$ [Required cut in G = $\$35bn * (1 - 0.75) = \$8.75bn$]
11. B. $\$62.33bn$ $\$121bn * [(1 - MPC) / MPC] = 121 * 0.34 / 0.66 = 62.33\bn
12. A. Increase by \$180 million
13. A. 0.75 (MPC = $\Delta C / \Delta Y = 0.75$ $Y_d = 0.75$)
14. C. $\$1,225$ ($C = 100 + 0.75 (1,500) = \$1,225$)
15. C. 0.816 (APC = $C / Y = 100 + 0.75 (1,500) = \$1,225 / 1,500 = 0.816$)

Chapter 24

Macroeconomic Objectives: Employment

Task 1 – Complete the missing words...

demand
supply
minimum
excess

Frictional
longer
Seasonal
Structural

long
Globalization
Unemployment
skills
occupational
Cyclical
aggregate
Keynesians
full

discouraged
inefficient
B
allocative
actual
potential
B
C

Task 2 – Matching exercise

a.

A,3
B,1
C,4
D,2

b.

A,2
B,4
C,1
D,3

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	T
e. Other way round	F
f.	T
g. The are not will to work so are excluded	F
h.	T
i.	T
j.	F

Task 4 – Unemployment Vocabulary Quiz

Key Term
Cyclical unemployment
Frictional unemployment
Hidden unemployment
Labour force
Seasonal unemployment
Structural unemployment
Underemployment
Unemployment
Unemployment rate

Task 5 – Explain...

- a.
- Raising standards of living for the average person in society
 - Positive correlation with employment (another macro-economic objective)
 - Raise tax revenues, e.g. income tax, sales taxes and stamp duty (on the sale and purchase of property)
 - Reduced fiscal burden on the government, in terms of spending on welfare benefits and the associated opportunity costs
 - Prevent a situation of ‘brain drain’ from the economy, whereby skilled labour leave in pursuit of better employment opportunities in other countries
- b. The explanation could include economic consequences such as:
- Lower GDP and the consequences on the domestic economy and its international competitiveness
 - Lower household income and the consequences for individuals and their families
 - Lower tax revenue for the government (from indirect as well as direct taxes)
 - Increased opportunity cost of government spending on welfare benefits for the unemployment
 - Greater disparities in the distribution of income and wealth, as it is the poorer members of society who are likely to be most affected by unemployment

- c. The explanation could include personal and social consequences such as:
- Deprivation and desperation lead to increased crime rates
 - Increased stress levels to the individual, their family and friends and hence society
 - In extreme cases, it can lead to family and marriage breakdowns
 - Increased indebtedness and the economic consequences, such as financial bad debt and bankruptcy
 - Personal bankruptcy can lead to absolute poverty, hunger, disease, homelessness and even suicides
- d.
- A wider range of vocational training programmes
 - Greater access to a wider range of university courses
 - More off-the-job and on-the-job training opportunities
 - Improve incentives for people to search and accept paid work, such as the use of reforms to the tax system and entitlement to welfare benefits
 - Flexible working patterns, such as part-time employment, shift working, teleworking and homeworking
- e.
- Government spending might fuel aggregate demand without any corresponding increase in real national output, thereby simply causing inflation
 - It might not deal with the root cause, i.e. incentives to work and accept paid work at the prevailing wage rate

Task 6 – Multiple Choice

1. A. Cyclical unemployment
2. B. Demand deficient
3. C. People work less productively than they are capable
4. B. Technological unemployment
5. A. Seasonal
6. D. Seasonal changes in aggregate demand
7. D. Those in full-time employment
8. C. Reduce direct taxes
9. D. It is caused by a lack of incentives to work
10. A. Voluntary unemployment
11. B. Discouraged workers
12. C. Those able to work but in full-time education
13. A. The labour force that is unemployed
14. B. Structural unemployment
15. D. Job training and development schemes
16. D. The official retirement in the country
17. D. Rising costs of production
18. D. Providing tax incentives and raising government spending
19. D. Increasing (re)training opportunities for the unemployed
20. D. Excess supply of labour exists in the labour market
21. C. 8.33% (HL Only)
22. B. 90 million (HL Only) (66.7% of 120m population = 80m + 10m unemployed = labour force of 90m)
23. C. 11.1% (10m / 90m = 11.1%) (HL Only)
24. A. 1.44 million (HL Only)
25. C. Those who are frictionally unemployed (HL Only)

Chapter 25

Macroeconomic Objectives: Inflation

Task 1 – Complete the missing words...

price
basket
average
income
greater
Cost-push
supply
Demand-pull
GDP
rightwards
demand
demand-pull

trade
prices
exchange
Deflationary
raising
reducing
human
Import

Monetarists
Keynesians
deflation
fall
Disinflation
rising
lower
expensive
increase
national output
price stability
quality
CPI
average

(HL Only)
unemployment
expansionary
outwards

non-accelerating inflation rate of unemployment
deflation
opportunity
vertical
natural
fall
right
stagflation

Task 2 – Inflation Vocabulary Quiz

Key Term
Deflation
Disinflation
Inflation
Menu costs
Natural rate of unemployment (<i>HL Only</i>)
Producer Price Index
Stagflation (<i>HL Only</i>)
Underlying rate of inflation

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e.	F
f.	T
g.	T
h.	T
i.	F
j.	T
k.	T
l	T
m. Short run only	F

Task 3 – Explain...

- a. Inflation can cause major problems for an economy, such as: higher prices and hence lower international competitiveness (and therefore job losses); uncertainty and labour unrest; negative impact on purchasing power (reduces the real value of money); negative impact on savings (essential for funding investments).

- b. Cost-push inflation occurs when prices are forced (pushed) up due to increasing costs of production, e.g. wage rates rising faster than productivity levels, higher prices of imported raw materials (or a fall in the exchange rate which drives up prices of imported raw materials and components). By contrast, demand-pull inflation occurs when prices are pulled up by excess demand for goods and services (perhaps due to lower interest rates and/or lower tax rate).
- c. Pursuing a low rate of inflation is likely to entail a combination of tight monetary policy (higher interest rates) and contractionary fiscal policies (lower government spending and/or higher taxes). Collectively, this is likely to reduce the level of economic activity, thus possibly harming growth, employment and international trade.
- d. Shoe leather costs refers to the time spent walking around to compare prices in the market (and hence incurs an opportunity cost). Menu costs require firms to continuously adjust menu prices (or price lists and price labels) and communicate these to customers because of the persistent rise in prices. With the internet, it is common for customers to be able to compare prices online easily and for firms to adjust their prices online with relative ease.
- e. A low but positive rate of inflation suggests economic activity is stable, with inflation likely to be caused by an increase in the general level of demand in the economy. By contrast, erratic rates of inflation do little for consumer and producer confidence levels thereby harming prospects of economic growth.
- f. These groups could include:
- Pensioners on fixed incomes
 - Adults in full-time education with part-time jobs
 - The affluent versus the less affluent members of society
 - Those on welfare benefits
- g.
- Fixed income earners such as pensioners will experience a fall in their real incomes due to inflation
 - Financiers who lend money to borrowers will receive back less in real terms as their money is worth less than when it was lent
 - Consumers see a fall in their purchasing power as the money is worth less than before
 - Savers lose out because their money is worth less in real terms (unless interest rates are higher than the inflation rate)
 - Employers may also lose out if their workers demand pay rises to maintain their real income levels. This raises their costs and could damage their profitability.
 - Even if wages rates did not increase, inflation raises the costs of raw materials and components, potentially harming the profitability of firms.
 - Exporters face declining competitiveness as average

prices have gone up, especially if the demand for exports is price elastic.

Task 5 – Calculations £€¥ (HL only)

- a. The rate of inflation = $130/125$ (or $130 - 125 / 125$) = 4.0%
- b. The CPI = $132 * 1.025 = 135.3$
- c. The weighted indices are shown below, giving a CPI of 130 (despite food price inflation being just 10% and 'others' having increased by 40%):

Item	Price Index	Weight	Weighted Index
Food	110	20	$110 * 0.2 = 22$
Housing	130	40	$130 * 0.4 = 52$
Others	140	40	$140 * 0.4 = 56$
			130

Task 6 – Multiple Choice

- 1. B. Consumer price index
- 2. C. Prices rise at a decelerating rate
- 3. D. It excludes the change in prices of subsidised goods and services
- 4. B. Hyper
- 5. D. Weights used to calculate the index can not be applied objectively
- 6. C. It does not affect money as a unit of account
- 7. C. It creates incentives for savings to preserve the value of money
- 8. D. Financial and currency crisis
- 9. C. Borrowers
- 10. D. Higher amount of consumer expenditure
- 11. D. Exporters gain from lower prices
- 12. A. Measures changes in the cost of living of a representative household
- 13. D. Compilation of the CPI is not quick to respond to changes in fashion, tastes and technology
- 14. C. Unemployment
- 15. C. People and businesses with existing debts
- 16. B. Reduced consumption due to higher loan repayments for those with existing loans
- 17. C. Producers of price inelastic products lose out in the short run
- 18. C. Disinflation can damage a country's international competitiveness
- 19. D. A rise in real national output along with a decline in the average price level
- 20. D. Disinflation occurs when the rate of inflation is negative, i.e. average prices are falling
- 21. A. Prices were at their highest in 2012 (HL Only)
- 22. D. Disinflation (HL Only)
- 23. A. In the long run, there is no trade-off between inflation and unemployment
- 24.

- 25. C. Spent a smaller proportion of their income on holidays than on clothing and footwear (HL Only)
- 26. B. 150.5 (HL Only)
- 27. B. Shift the Phillips curve to the left (HL Only)
- 28. B. Cause a movement up the Phillips curve (HL Only)
- 29. C. An appreciation in the exchange rate (HL Only)
- 30. C. 5% (HL Only)
- 31. D. The short run Phillips curve shifts from $SRPC_1$ to $SRPC_2$ due to workers realising that real wages have increased Real wages have fallen with inflation, so workers push for higher money wages, thereby causing inflation without any corresponding change in the NRU (HL Only)

Chapter 26

Macroeconomic Objectives: Economic growth

Task 1 – Complete the missing words...

- national
- percentage
- standard
- potential
- increase
- right
- outwards
- labour
- Labour

Task 2 – Vocabulary Quiz

Key term
Real GDP
Potential output
Physical capital
Natural capital
Human capital
Economic growth
Actual output

Task 3 – Explain...

- a.
- Employment – economic growth stimulates higher employment and the associated benefits of employment
 - Improved standards of living – there is a strong, positive correlation between economic growth and the average person’s standards of living; it can also help to eradicate absolute poverty in the economy
 - Tax revenues – economic growth has a positive effect on government finances as tax revenues increase (expenditure and taxes) and there is a lower burden on government expenditure (spending on welfare benefits fall)
 - There is an accelerator effect - rising levels of aggregate demand and confidence levels encourage further investment in capital, helping to sustain the growth of the economy and its international competitiveness
- b.
- The risk of inflation – if the economy grows too quickly, there is the danger of demand-pull inflation with its associated drawbacks (such as the negative impact on the international competitiveness of the country).
 - Environmental consequences – rapid economic growth can create negative externalities (such as pollution, congestion, land erosion and climate change) which damage people’s long term wellbeing and hence their quality of life.
 - Resource depletion – many of the world’s scarce and finite resources are extracted at increasingly rapid rates to fuel globalization and economic growth, but this is clearly unsustainable and detrimental to the long term prosperity of the country. Examples include deforestation and overfishing.
 - Inequalities of income and wealth - Not everyone benefits from economic growth to the same extent (the concept of the rich getting richer, or needing money to make money). Economic growth is often associated with a greater disparity in the distribution of income and wealth for the ‘average’ person, i.e. there is a widening gap between rich and poor even if average incomes are rising.
- c.
- Investment in three areas is important for sustained economic growth: human capital, physical capital and natural capital. This helps to shift the LRAS curve (or the PPF) to the right, thereby raising economic growth. Investment is also a key component of aggregate demand, so an increase in investment should boost economic growth, ceteris paribus.
- d.
- Real GDP is calculated by dividing nominal GDP by the GDP deflator (for that year to account for the rate of inflation), and then multiplying the result by 100.

Task 4 - True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e.	F
f.	T
g.	T
h.	T
i.	T
j.	T

Task 5 – Multiple Choice

1. A. Real GDP
2. C. A recession
3. D. Plant and machinery
4. B. Effectively limitless
5. A. Production Possibility Curve
6. C. Actual and potential real GDP
7. D. Lower interest rates
8. D. There is an opportunity cost in providing more services
9. A. Lower unemployment and economic growth
10. C. Increased price levels
11. D. Supply side shocks to the economy
12. B. Sustainable growth
13. C. Shift the long run aggregate supply curve to the right
14. C. Larger workforce
15. C. Long-run aggregate supply curve to the left
16. C. There is a direct relationship between growth and external costs
17. B. Shift the production possibility curve outwards
18. D. A long run trade-off between economic growth and inflation
19. B. \$111.6bn (*HL Only*)

Year	Nominal GDP (\$bn)	GDP deflator	Real GDP (\$bn)	Growth rate (%)
2011	110.0	100.0	110.0	-
2012	115.5	103.5	111.6	1.45
2013	121.0	105.0	115.2	3.22

20. C. 3.22% (*HL Only*)

Chapter 27

Equity in the distribution of income

Task 1 – Matching exercise

1, f
2, k
3, l
4, a
5, b
6, c
7, m
8, j
9, d
10, e
11, o
12, n
13, i
14, h
15, g

Task 2 – Explain...

- a. Equality means that income is distributed equally, i.e. the Gini coefficient is 0. Equity refers to fairness, e.g. the view that those who study and work harder should be rewarded accordingly or it is fair (justified) that those with better qualifications and experience earn more money.
- b. Progressive taxes have tiered (or marginal) rates of tax, meaning that those who earn more pay a greater proportion of their income in tax. Regressive taxes, such as a goods and services tax, account for a greater proportion of tax on lower-income earners.
- c. Direct taxes are imposed on income (earnings), such as corporation tax and inheritance tax. Indirect taxes are imposed on expenditure, such as duties on tobacco, alcohol and petrol.
- d. Answers could include:
 - To redistribute income (helping the relatively less well-off in society)
 - To raise money for government spending (fiscal policy)
 - Keynesian demand management – to fund government intervention during times of recession and depression, with high unemployment when markets fail to clear
 - To correct market failures, such as pollution, congestion and damage to the natural environment
- e.
 - Fairness (equitable) – taxes should be based on the taxpayers’ ability to pay

- Cost – the cost of collection (for the government) should not be too high, i.e. it should be a relatively small proportion of the tax yield
- Convenience – taxes should be as easy as possible for the taxpayer to pay (in terms of methods and timing of payments)
- Certainty – the amount and deadline of the tax due should be absolutely clear, which can also help to limit the number of tax evaders with excuses of non- or late payments.

Task 3 – True or False?

	True / False
a.	T
b.	T
c. No, but it does under a regressive tax system.	F
d. No, it charges more tax as a percentage of the individual’s (higher) income.	F
e.	T
f.	T
g.	T
h. This refers to the marginal rate of tax.	F
i.	T
j.	T

Task 4 – Multiple Choice

1. D. Investment in education and training
2. D. Countries with the same Gini coefficient, have the same income and wealth
3. C. High rates of tax
4. D. It measures material deprivation in a country
5. A. Relative poverty will stay the same (in Option B, it falls)
6. D. Government spending on public transport systems
7. B. Takes an increasing proportion of personal income as income rises
8. D. Lack of effective direct taxes
9. D. Public transportation
10. C. Capital gains tax
11. C. Postal services likely to be run / funded by the government
12. B. New car registration tax
13. C. Someone who earns \$50,000 a year will pay more tax than someone on \$25,000 a year
14. B. Proportionate Both pay a flat rate of 10% income tax

- 15. A. A more equitable income distribution can increase efficiency and economic growth
- 16. A. It can create disincentives to work, thereby harming efficiency and economic growth
- 17. B. Perfect income equality
- 18. A. Cumulative share of population
- 19. D. The 4th quintile earns 40% of the national income
- 20. A. \$10,000 This is the tax-free income, i.e. the amount that can be earned before the individual has to pay income tax (HL Only)
- 21. C. 40% The last dollar is taxed at 40% (HL Only)
- 22. A. 22.5% (Average tax rate = tax paid / income; given \$30K is taxable income and \$15K is taxed @ 20% = \$3K, and the remaining \$15K is taxed @ 40% = \$6K, the average tax rate = \$9K/40K = 22.5%) (HL Only)
- 23. A. \$5,100 [\$8k @ 0% + \$7k @ 10% (= \$700) + \$20k @ 20% (= \$4,000) + \$1k @ 40% (= \$400) = \$5,100]
- 24. C. 18.75% Average rate of tax = Taxable income / Personal income = (30,000 * 0.25) / 40,000 = 18.75% (HL Only)
- 25. C. Increase by \$2,500 (HL Only)

Chapter 28

2.4 Fiscal Policy – The government budget

Task 1 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	F
e.	T
f.	T
g.	T
h.	F
i.	T
j.	F
k.	T

Task 2 – Explain...

- a. Real GDP growth is negative during a recession, so tax receipts decline (there is likely to be a fall in revenues from income taxes, goods and services taxes, and capital gains taxes). However, government spending on welfare benefits is likely to soar during a recession.
- b. Current expenditure – ongoing, short term spending for immediate benefit / operations, e.g. wages and salaries for public sector workers.

Capital expenditure – long term items of spending that boost productive capacity, e.g. upgrading computer systems or the building of new roads and airports.

Transfer payments – income payments from the government to third parties without any corresponding return, e.g. unemployment and other welfare benefits.
- c. A balanced budget occurs when government spending matches government revenues, i.e. there is no extra or shortfall of government finance or $G = T$. A budget surplus occurs when the sum of government revenue exceeds the sum of its spending, i.e. there is a surplus of government funds or $G > T$.
- d. Direct and indirect taxes fall during a recession, whilst government expenditure will rise (on items such as social welfare benefits). Hence, $G > T$ so a deficit occurs, ceteris paribus.
- e. There is a negative relationship between the level of government debt and the value of the budget – the more a government owes, the greater the likelihood of a budget deficit as government spending on debt repayment rises, ceteris paribus. Similarly, if the government runs a budget deficit (perhaps because the economy is in recession), then government debt is likely to rise as the government seeks to borrow funds to finance its spending.
- f. Revenue from the sale of goods and services of state-owned enterprises; Revenue from the sale of state-owned assets (privatisation proceeds); Government borrowing – e.g. commercial loans or the issuing of government bonds; Printing money (albeit inflationary); or a sovereign wealth fund (SWF) – i.e. state-owned investment funds such as stocks, shares, bonds of other governments, property and gold reserves.

Task 3 – Multiple Choice

- 1. B. Budget deficits
- 2. D. Reduce the rate of unemployment
- 3. C. Government spending and consumption
- 4. C. Public sector debt repayment
- 5. B. Government subsidies

6. B. Privatization proceeds
7. C. Current expenditure
8. B. Purchasing raw materials for production
9. D. Foreign direct investment
10. C. There is a budget deficit

Chapter 29

2.4 Fiscal Policy – The role of fiscal policy

Task 1 – True or False?

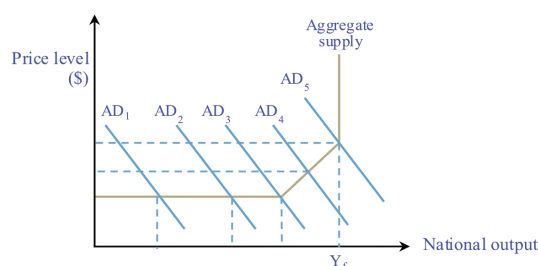
	True / False
a.	T
b.	T
c.	T
d.	T
e.	T
f.	F
g.	T
h.	F
i.	T
j.	F
k.	T

Task 2 – Explain...

- a. Expansionary fiscal policy (e.g. tax cuts and increased government spending) boost AD; this also helps to boost consumer and business confidence levels, thereby creating an environment conducive to investment and human capital formation.
- b. Crowding out occurs when expansionary fiscal policy through increased government borrowing (to finance its spending) causes interest rates to rise, thereby reducing investment expenditure and the number of individuals borrowing in the money market.
- c. During an economic boom, the progressive tax system means the governments automatically collects more (direct and indirect) tax revenue whilst government spending on welfare benefits falls, i.e. there is a budget surplus. This surplus can be used during a recession to stabilise the economy. Also, both low income earners and high income earners might qualify to pay a lower marginal rate of income tax in a recession; thus minimizing reduced consumption expenditure.

d. A deflationary gap (also called a recessionary gap) occurs when macro equilibrium is below full employment equilibrium, i.e. the level of aggregate demand (AD) is insufficient to lead to full employment. Therefore, fiscal stimulus is required to restore the economy, e.g. tax cuts and/or increased government spending. The opposite applies to a reflationary gap, which occurs when AD exceeds AS at the full employment level of output, i.e. the amount by which the real GDP exceeds potential GDP. This excess AD will tend to increase the price level, causing inflation.

- e. Depending on the state of the economy (business cycle), fiscal policy can be used to:
 - Purchase more or fewer goods and services
 - Raise or lower taxes
 - Change the level of income transfers (transfer payments)
- f. Boosting AD from AD1 to AD2 (or AD2 to AD3) has no effect on the level of prices as the economy has spare capacity and unemployed resources (along the horizontal part of the AS curve). Boosting AD when AS is upwards sloping (such as from AD3 to AD4) will have some inflationary impact, thereby reducing the effectiveness of expansionary fiscal policy. Expanding AD beyond the productive capacity (full employment) level of the economy (in this case beyond AD5) is simply inflationary and ineffective in increasing national output.



Task 3 – Multiple Choice

1. B. Interest rates
2. D. Raise taxes alongside cuts in both transfer payments and government spending
3. B. Multiplier
4. D. Progressive tax systems
5. D. Increased government spending
6. A. Improve in nominal terms
7. C. component of fiscal policy that automatically changes as real national output changes
8. A. Government deliberately raising tax and reducing government spending policies to regulate real national income
9. B. To redistribute income and wealth in the economy
10. A. Stimulate the level of aggregate demand
11. D. The extent to which a budget surplus is achieved
12. C. Transfer payments
13. C. The multiplier effect
14. B. Financial crowding out
15. A. Time lags

- 16. D. Fiscal stimulus equal to, or greater than, the deflationary gap can restore macro economic equilibrium through the multiplier effect
- 17. A. Horizontal
- 18. A. Expansionary fiscal policy
- 19. C. Deflationary gap
- 20. D. Value of dis-savings

Chapter 30

2.5 Monetary Policy: Interest Rates

Task 1 – Complete the missing words...

demand
supply
rise
less
increased
fall
save

Task 2 – Explain...

- a.
 - Bankers’ bank – regulator of the commercial banking system in the economy; clearing house function to settle the mutual transactions of commercial banks; gives advice on financial and economic matters
 - Government’s bank – responsible for the money of the government, including foreign currency reserves
 - Sole issuer of legal tender – control of the money supply through printing notes and coins
 - Lender of last resort – provides loans to commercial banks when necessary to ensure liquidity of the banking system and to prevent financial crises
 - Credit control – control the volume of credit through measures, such as changes in reserve ratios, to accomplish macroeconomic objectives
 - Monetary policy – responsible for regulating interest rates in the economy to affect the money supply and exchange rates
- b.
 - There is no single market for loanable funds (e.g. mortgage market versus bonds market)
 - Borrower and lenders may wish to borrow/lend for different lengths of time
 - Borrowers have different risk profiles (e.g. governments, multinationals, partnerships and sole traders represent different levels of risk for financiers)

Task 3 - True or False?

	True / False
a.	F
b.	F
c.	F
d.	F
e.	F
f.	T
g.	T
h.	T
i.	T
j.	T

Task 4 – Multiple Choice

- 1. A. The real interest rate is negative
- 2. C. It varies directly with the level of interest rates
- 3. A. The quantity of money demanded exceeds the quantity supplied
- 4. B. Increase the interest rate
- 5. D. Decrease interest rates and increase equilibrium national output
- 6. D. Residential property
- 7. A. An increase in the exchange rate
- 8. A. At any point in time, the supply of money is fixed by the central bank
- 9. C. r_1 and $Q_1 - Q_2$
- 10. A. More money is available than people wish to hold

Chapter 31

Monetary policy – the role of monetary policy

Task 1 – Vocabulary Quiz

Key term
Central bank
Demand for money
Expansionary monetary policy
Inflation rate target (or inflation targeting)
Interest rate
Monetary policy

Money supply
Tight monetary policy
Time lags

Task 2 – Explain...

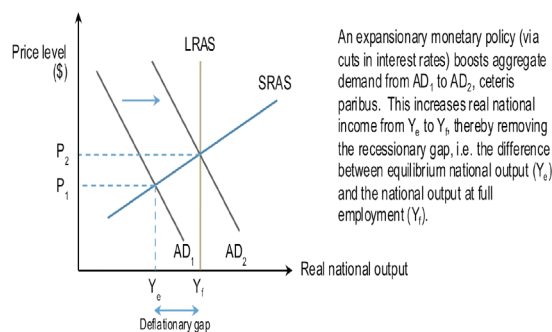
- a. Lower interest rates are likely to:
- C, I and G are all likely to rise since borrowing is cheaper and those with existing loans have a higher discretionary income due to the lower interest rate
 - Net exports are likely to improve too as lower interest rates tend to lead to lower exchange rates (the demand for the currency falls on the foreign exchange rate market due to the lower rate of interest from holding the domestic currency).
- b. This occurs when the nominal interest rate is below the annual rate of inflation. For example, if the nominal (i.e. actual) interest rate is 5% whilst the inflation rate is 6%, then the real interest rate is -1% (i.e. $5 - 6$). Hence, someone with \$100 savings in the bank for a year would earn \$5 interest, giving them a total of \$105 after the first year. However, inflation means that something that cost \$100 a year ago would now cost \$106, so in real terms the money saved would have fallen in value (in real terms).
- c.
- Ceteris paribus, lower interest rates will shift the AD curve to the right, boosting national output and lowering unemployment in the longer term
 - The central bank may aim for stable inflation by manipulating the interest rate and/or money supply
- d.
- The current rate of economic growth and unemployment, e.g. an output gap may require a reduction in interest rates
 - House prices which have a direct effect on consumer confidence levels and consumer demand
 - The rate of growth of wages (labour costs) since higher costs usually mean firms increase prices (causing inflationary effects)
 - The price of raw materials, e.g. a surge in oil prices will cause inflationary effects on the economy
 - The rate of exchange of the currency on the foreign exchange market, e.g. a strong currency tends to deter net exports (import prices being relatively low to export prices), so a reduction in interest rates may be required
 - Business and consumer confidence levels, e.g.

lower interest rates may be required to boost confidence in the economy

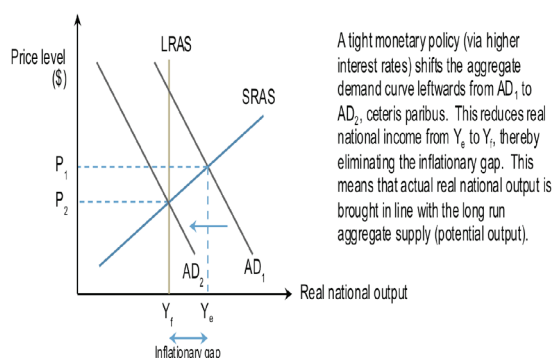
- e.
- Time lags of changes in the interest rate and money supply can be destabilising to the economy
 - Limited success in affecting aggregate demand if the economy is in an economic depression and/or if consumer and business confidence levels are low
 - Changes in interest rates (to affect the level of economic activity) may conflict with other macroeconomic objectives, especially with inflation
 - Restricting monetary growth by increasing bank reserve requirements can cause government (rather than market) failure, thereby causing banks to become less efficient and less efficient
 - Consumption and investment expenditure are not totally and solely dependent on interest rates
 - Inflationary pressures can cause a price-wage spiral in the labour market, thereby limiting the effectiveness of any tight monetary policy

Task 3 – Diagrams

a.



b.



Task 4 - True or False?

	True / False
a.	T
b.	T
c.	F
d.	T

e.	T
f.	T
g.	T
h.	F
i.	F
j.	T
k.	T

Task 5 – Multiple Choice

1. C. Aggregate demand
2. D. Aggregate demand curve to the right
3. D. The total interest received by the bondholder would exceed \$250 in 10 years' time
4. B. Increase consumer spending, due to lower borrowing costs, thus increasing aggregate demand
5. D. Its ability to mint (print) notes and coins
6. B. The emergence of inflationary pressures
7. C. Inflation
8. D. Discretionary income
9. D. The compliance of commercial banks in changing their interest rates
10. C. decrease; increase
11. A. increase; decrease
12. A. Aggregate demand
13. C. Interest rates
14. A. Can be implemented more quickly and decisions are reversible
15. B. Raising corporation tax rates

Chapter 32

Supply-side policies – The role of supply-side policies

Task 1 – Matching exercise

a.

1, d
2, e
3, b
4, f
5, g
6, a
7, c

b.

Example	Market-based	Interventionist
i.		✓
ii.	✓	
iii.	✓	
iv.	✓	
v.	✓	

vi.		✓
vii.		✓
viii.	✓	
ix.	✓	
x.	✓	

Task 2 – Explain...

- a. Possible advantages include:
- Improved economic growth – supply-side policies can be used to increase the sustainable rate of economic growth by increasing the productive capacity (aggregate supply of the economy)
 - Lower Inflation – shifting the LRAS curve to the right will tend to lower the general price level
 - Lower Unemployment – an increase in LRAS will tend to increase output and production, thereby creating an increase in the demand for labour
 - Lower the natural rate of unemployment (NRU) – supply-side policies can help to reduce structural and frictional unemployment thereby helping to reduce the NRU
 - Improved balance of payments – supply-side policies help to make firms more productive and competitive thereby helping to boost export.
- b.
- Reduction in unemployment and welfare benefits to create incentives to work
 - Privatization of state-owned assets if the private sector is more efficient in running the organization (due to having a profit motive to reduce costs and develop better products and services)
 - Deregulation or the removal of barriers to entry to make markets more competitive
 - Labour market reforms, such as improving education and training of the workforce to make workers more geographically and occupationally mobile
 - Creating incentives to work – decreasing unemployment benefits and/or decreasing tax rates to improve the quality or quantity of labour
 - Removal of labour market imperfections, e.g. decreasing the national minimum wage and/or the power of trade unions.

Task 3 – True or False?

	True / False
a.	T
b.	T
c.	T
d. LRAS increase whilst prices fall	F
e.	T

f.	T
g. It is an interventionist policy	F

in these industries, and the chance of sustainability in the longer term. Policies such as tax breaks and other incentives can also help to revive certain industries, helping them to prosper (develop) in the long term.

Task 4 – Multiple Choice

- D. Government provision of transport infrastructure
- C. Market-based supply-side policies
- D. The use and manipulation of interest rates to affect the level of economic activity
- D. Interventionist supply-side policies
- A. Make the labour market more responsive to changes in demand and supply
- A. Supply-side economists
- A. Reduce welfare benefits to the unemployed and single parents
- B. State-owned assets to the private sector
- D. Policies to improve competition in the economy
- C. The financial return to the factors of production

Chapter 33

Supply-side policies – Interventionist supply-side policies

Task 1 – Explain...

- Human capital refers to the stock of knowledge, skills and experiences embodied in the workforce. It can be increased through investment in education and training which helps to generate national income and boost the productivity capacity of the economy, thus it is of utmost importance for growth and development.
- Not only does the investment have a short-term effect on aggregate demand, investment in new technology can help to boost the productive capacity and productivity of the economy. Spending on R&D can help to make work processes more efficient and can generate new products for consumption (e.g. energy efficient cars and smartphones). Innovation can also be a good source of international competitive advantage.
- Again, investment being a key component of aggregate demand can help to boost GDP in the short run as an economy spends money developing its infrastructure. In the long term, better infrastructure increases the long run aggregate supply of an economy and attract FDI (foreign direct investment), helping the economy to prosper further.
- Industrial policies target growth in specific industries, perhaps protecting them from foreign competition. This can undoubtedly improve the welfare of the economy in terms of reduced unemployment, higher incomes and spending for those working

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e. Only if this investment is efficient	F
f.	T
g.	T
h.	T

Task 3 – Multiple Choice

- C. Public sector spending
- B. Policies aimed at promoting job opportunities and growth in specific industries
- D. Increasing the population size
- A. Tax breaks aimed at specific firms in a certain industry This will have an impact on LRAS but is unlikely to really affect AD
- A. Government investment in research and development projects
- D. Investment in human capital
- D. Industrial policy
- D. Research and development This is investment in new technology, not infrastructure
- C. It includes improving the geographical and occupational mobility of labour
- B. It has no impact on aggregate demand, but shifts aggregate to the right

Chapter 34

Supply-side policies – Market-based supply-side policies

Task 1 – Matching exercise

1, c
2, f
3, a
4, b
5, j
6, i
7, k
8, l
9, d
10, e
11, h
12, g

Task 2 – True or False?

	True / False
a.	T
b. Not necessarily; private sector monopolies are not always more efficiently run	F
c.	T
d. Better to reduce direct taxes	F
e.	T
f.	F
g.	T
h. The key benefit is the ability to create jobs without inflationary pressures	F
i.	T

Task 3 – Multiple Choice

- A. Industrial policy. (This is an interventionist supply-side policy)
- D. Tax cuts to create incentives to work
- D. Increasing the investment in a country's infrastructure to boost its productive capacity
- C. Removing imperfections in the labour market
- C. Uphold the welfare of its members
- A. Reducing the lower tax band to increase incentives to look for and accept employment opportunities

- C. Improving the long run trend rate of economic growth
- C. A cut in the basic rate of personal income tax
- C. Increasing subsidies paid to strategic industries
- A. Inflationary pressures

Chapter 35

3.1 International trade - Free trade

Task 1 – Vocabulary Quiz

Key term
Absolute advantage <i>(HL Only)</i>
Comparative advantage <i>(HL Only)</i>
Economies of scale
Factor endowments <i>(HL Only)</i>
Free trade
World Trade Organization

Task 2 – Explain...

- Free trade means a larger (global) market, leading to huge potential cost savings for a firm that can mass market its products/services.
- Competition makes firms (both domestic and foreign) more responsive to consumer demand, thereby promoting consumer sovereignty and economic efficiency. It also creates choice for consumers. Free trade can also help to reduce the power of domestic monopolies by exposing them to external competition.
- Lower/more competitive prices for consumers; Greater consumer choice; Increased competition, i.e. improved economic efficiency (allocation of resources); Allows access to different commodities, including much-needed resources such as oil; Economies of scale for producers; A source of foreign exchange for firms and governments.
- The net gains from international free trade exceed the costs, i.e. although not everyone gains from free trade, or gains equally, the net benefits to society are positive.

Task 3 - True or False?

	True / False
a.	T
b.	F
c.	F
d.	T
e.	T
f.	T
g.	F
h.	T
i.	T
j.	T
k.	F
l.	T
m.	T
n.	T

Task 4 – Multiple Choice

- D. Economies of scale
- C. Official financial support for certain domestic industries
- C. Welfare gains
- A. The efficient allocation of scarce resources
- B. Reduce the general level of protectionism
- D. Promote international monetary cooperation
- A. Exports more services
- C. It can reduce structural unemployment caused by business relocations
- C. It seeks to expose domestic monopolies to external competition by encouraging free trade
- C. Goods and services are produced from the same combinations of resources

Task 5 – Multiple Choice – Comparative and Absolute advantage (HL Only)

- B. Comparative advantage
- D. Comparative advantage
- A. Absolute advantage
- B. Producer B has an absolute advantage in the output of the product
- D. The model fails to explain the gains from trade
- C. The opportunity cost of car production is lower in China than in the USA
- B. Economies of scale, i.e. if countries specialise, the potential financial gains from trade are much greater. The model assumes constant returns to scale
- D. The level of economic activity
- C. Produce the product and export it

- D. As the USA can produce more of both products, there is no benefit in trading with France
- B. 50,000 tons Ratio of corn to grapes = 50:1
- C. Keithland's opportunity cost of producing one unit of Spanny is 0.08 units of Morganics

	Morganics (units)	Spanny (units)	Ratio (Q12)	Ratio (Q13)
Keithland	800	0	0.08 : 1	8 : 100
	0	10,000		
Philand	400	0	0.05 : 1	4 : 80 or 8 : 160
	0	8,000		

- D. 160 units $(8,000/400) * 8 = 160$ units
- B. Australia should specialise and export Jukes

Country	Jukes (units)	Satcoles (units)	Ratio
Australia	2,600	800	3.25 : 1
Vietnam	1,200	400	3 : 1

- A. If Tonina specialises in only producing drinks Phoebeli gives up 400 units of drinks, then there are gains from trade

Country	Drinks (units) and Food (units)	Ratio
Tonina	500 and 1,500	1:3
Phoebeli	600 and 2,400	1:4

Before trade: total drinks output = 1,100 units and total food output = 3,900 units

Country	Drinks	Food
Tonina	$500 + (1,500 / 3) = 1,000$	0
Phoebeli	200	$2,400 + (400 * 4)$
Total (with trade)	1,200 (gain = +100)	4,000 (gain = +100)

- C. Incorrect answer - There will be 4,800 units of food (a gain of 900 units) but a loss of 100 units of drinks
- D. Incorrect answer - If Phoebeli specialises in only producing drinks and Tonina specialises in only producing food, then there are net gains from trade. There would be huge losses if this happened!

Chapter 36

3.1 International trade – Trade protection

Task 1 – Complete the missing words

foreign
tariffs
supply
switching
red
scarce
efficiency
quotas
domestic

Task 2 – Vocabulary Quiz

Key term
Barrier to trade
Dumping
Embargo
Protectionism
Quota
Subsidy
Tariff
Voluntary Export Restraints (VERs)

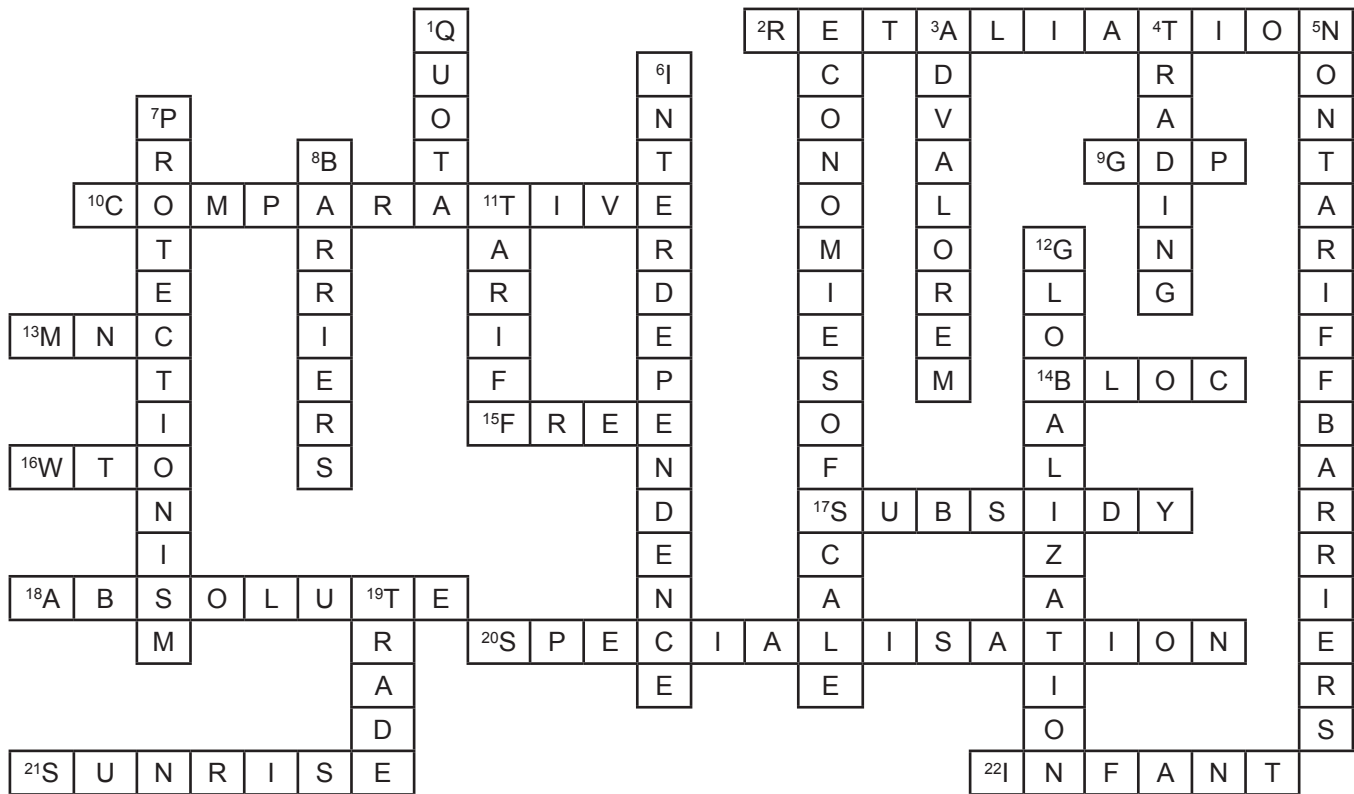
Task 3 – Explain...

- Increased costs of production and bureaucracy (completing paperwork to ensure that health and safety standards are being met) lead to delayed output and/or deter foreign businesses from entering the market.
- Subsidies can help infant industries to reduce their costs of production, thereby improving their competitiveness; Quotas can help to limit the degree of rivalry; tariffs can help sunrise industries in the domestic economy to gain price advantages.
- Dumping refers to the selling of goods and services below the cost of production, often backed by government subsidies as a form of protectionism. This gives domestic producers an unfair competitive advantage and distorts market forces and natural comparative advantages.
- Protectionism helps to reduce the volume and value of imports, thereby helping to reduce a BOP deficit on current account.

Task 4 - True or False?

	True / False
a.	T
b.	F
c.	T
d.	T
e.	F
f.	T
g.	F
h.	T
i.	T
j.	T

Task 5 – Crossword: International trade and Protectionism



Task 6 – Multiple Choice

1. C. To encourage importing price inelastic imports
2. A. Increase government tax revenues
3. D. Structural adjustment programmes
4. A. Quantitative limit on imports
5. A. Inefficient allocation of scarce resources
6. A. A payment from the government to producers to reduce their costs of production
7. A. Lower prices to domestic consumers
8. C. Domestic consumers
9. B. Domestic producers
10. B. Benefits efficient foreign producers
11. D. Limits placed on the amount of imports that can enter a country
12. C. Reduced domestic unemployment
13. B. Imported inflation
14. D. Higher taxation revenues
15. D. f
16. C. m,e,f,g
17. A. e,g
18. A. f, j
19. C. b,c,d,e
20. A. and Q_2
21. B. They could previously purchase Q_5 but can only buy Q_4 at a higher price at P_{quota}
22. B. $\$3,000,000 (\$200 - \$100) * 30,000 = \$3m$
23. A. 40,000kg and 20,000kg respectively (50k - 10k) and (50k - 30k)
24. C. $\$5,000,000 (50,000kg * \$100) = \$5m$
25. B. $\$2,000,000 (50k - 30k * \$100) = \$2m$

3.2 Exchange rates

Task 1 – Complete the missing words...

price

50

falls

45.45

0.2

demand

supply

floating

reduction

appreciated

depreciated

inelastic

more

145.2

10

fixed

Central

increasing

foreign

sell

revalued

devalued

selling

HKD

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e.	T
f.	T
g.	F
h.	T
i.	T
j.	F

Task 3 – Explain...

- a. Limited impact of monetary policy changes to affect the economy (particularly useful in a recession to boost competitiveness); The opportunity cost of using large foreign exchange reserves to maintain the fixed exchange rate against other currencies.
- b. Cheaper imports leads to rising import penetration and a larger trade deficit; Exporters lose price competitiveness and market share as export prices rise (thereby harming profits and employment in some sectors of the economy); There are negative multiplier effects if exports fall, thereby harming economic growth.
- c. The Central bank can use interest rates to influence hot money flows or intervene directly in the foreign exchange market by buying or selling foreign exchange from reserves.
- d. Whilst changes in exchange rates affect the economy, these impacts take time to show through, perhaps due to existing contracts between exporters and importers. There are time lags between a rise (or fall) in the exchange rate and their impact on economic variables such as inflation, GDP and the balance of payments.
- e. Cutting export prices (but accepting lower profit margins) to maintain international competitiveness and market share; Seeking alternative overseas suppliers, or outsourcing components from foreign firms; Improved productivity / efficiency gains to keep unit labour costs under control; Focus on supplying more price inelastic and/or income inelastic products (customers become less sensitive to exchange rate fluctuations and where non-price

factors are more important to overseas customers); Relocating production units overseas (where production costs would be relatively lower and operations would be less vulnerable to exchange rate movements).

Task 4 – Diagrams

- a. The USA will need to sell USD to buy the Chinese currency (the RMB). This reduces the price of the USD, i.e. there is fall in the exchange rate.
- b. The Japanese have to buy USD (to pay for the American products), thus the price of the USD should increase, *ceteris paribus*.
- c. A rise in interest rates tends to attract ‘hot money’ and makes saving the USD more attractive to hold, *ceteris paribus*. Hence, foreign individuals and firms will demand the USD, pushing up the value of the currency.
- d. The pent-up demand from speculators will fuel (or push up) the value of the USD on the foreign exchange market, *ceteris paribus*.

Task 5 – Multiple Choice

- 1. B. Freely float
- 2. D. Increased desire to save in overseas banks
- 3. B. Slower economic growth in Vietnam
- 4. B. Price of Swiss imports will fall
- 5. C. An increase in the demand for UK imports
- 6. B. Excess supply with a subsequent fall in the exchange rate
- 7. A. The price elasticity of demand for imports is price elastic
- 8. A. Selling its own currency
- 9. D. An increase in domestic interest rates reduces aggregate demand and therefore the exchange rate tends to also fall
- 10. A. An increase in domestic interest rates
- 11. C. Domestic inflation
- 12. D. A depreciation of the exchange rate can be used to correct a trade deficit
- 13. B. The peso has depreciated by over 15% against the dollar
- 14. C. An extra \$24,000 per car
- 15. A. An increase in US demand for European exports
- 16. C. The Federal Reserve raises US interest rates
- 17. A. Sell foreign exchange reserves to increase demand for the domestic currency
- 18. C. The price elasticity of demand for exports and imports are greater than one
- 19. B. Currency depreciation can help to adjust a balance of payments disequilibrium
- 20. B. The People’s Bank of China buys foreign currency on the foreign exchange market

Chapter 38

3.3 Balance of Payments

Task 1 – Complete the missing words...

money
12
current
deficit
trade
exports

capital
dividends
financial
hot
portfolio

imports
cheaper
expensive
rise
high

Expenditure-reducing
higher
lower
Expenditure-switching

demand
supply

Higher Level
devaluation
J curve
Marshall-Lerner
price elasticity of demand
one

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	F
e.	F
f.	T
g.	T
h.	T
i.	F
j.	T

Task 3 – Explain...

- a. Imports use up foreign exchange, with a corresponding outflow of money from the domestic economy. Hence, the leakage (withdrawal) from the circular flow represents a debit (minus) item on the BoP.
- b. Pressures on the exchange rate to rise (with potential drawbacks in the long term); Trading partners are likely to suffer a BoP deficit.
- c. In theory, this should increase the demand for exports and reduce the demand for imports; Whether the currency depreciation does correct the BoP deficit depends on the PED for both imports and exports (the Marshall-Lerner condition).
- d. They lack any comparative advantage in the provision of financial services such as insurance and banking; There is relatively lower demand for their currency due to limited export opportunities and financial instability; Government debt and loans fuel the deficit on the capital account; Due to lower GDP per capita, domestic investors are unlikely to earn much interest, profit and dividends.
- e. The US economy receives the money used to purchase the bonds (hence a capital injection) whereas the Japanese face a negative (outflow) transaction on its capital account.
- f. In the short run, a devaluation or depreciation of the domestic currency will not improve the BoP deficit due to time lags (households and firms need time to adjust to the changes in export/import prices). The lower exchange rate also causes a rise in the price of imports (which remains price inelastic in the short run), thereby worsening the deficit. In the longer term, the price elasticity of demand for imports and exports will increase as households and firms adjust to the relative changes in export and import prices (the lower exchange rate should help to boost export sales, *ceteris paribus*).
- g. A BoP deficit can signal several underlining problems for the economy: structural economic problem weaknesses (a loss of international competitiveness and/or a shift in comparative advantage to other countries); insufficient investment in supply-side policies; An unbalanced economy due to excessive consumption which is unsustainable in the long run; Opportunity cost in terms of lost output and unemployment due to the BoP deficit; Loss of consumer, producer and investor confidence levels (with detrimental impacts of long term growth of the economy); A declining currency that might fuel imported inflation with its negative impact on GDP and unemployment; A BoP deficit is often associated with a depletion of foreign currency reserves.

Task 4 – Categories of the balance of payments

Transaction	Export (good)	Export (service)	Import (good)	Import (service)	Investment income	Current transfer
AIG sells insurance in China		✓				
American tourists visit Europe				✓		
Brazil buys American coal	✓					
China buys US treasury bonds					✓	
Dividends paid to foreign owners					✓	
Earnings of US expatriates						✓
Foreign tourists visit the USA		✓				
Honda sells 32,000 cars in the USA			✓			
Profits from US multinationals					✓	
Purchase of Canadian beef			✓			
Purchase of steel from India			✓			
Sale of oil to Mexico	✓					
Subsidies to US farmers						✓
US aid to flood victims overseas						✓

Task 5 – Multiple Choice

- C. The exchange rate
- D. Foreign aid from the World Bank
- D. Terms of trade
- B. Value of exported goods minus the value of imported goods
- D. Engineering
- C. Development aid
- A. – \$2.5bn (current account – net income transfers, i.e. –\$6.7bn + \$8.2bn – \$4bn)
- B. – \$6.7bn (\$15.3bn – \$22bn)
- B. Freely floating
- B. A credit on the US capital account
- C. Higher interest rates
- A. ownership of assets abroad
- B. Change in import expenditure divided by change in income
- C. Subsidies for domestic producers
- C. Increased labour productivity
- D. Lower rates of income tax
- A. Expenditure-switching policies
- B. A credit in the capital and financial account
- C. The balance of trade worsens before it improves
- A. Interest, profits and dividends from assets owned and located overseas

Chapter 39

Economic integration

Task 1 – Key terms...

Key Term
Bilateral trade agreement
Common market
Customs union
Economic integration
Free trade area
Monetary union
Multilateral trade agreement
Preferential trade agreement
Trade creation (<i>HL Only</i>)
Trade diversion (<i>HL Only</i>)
Trading bloc

Task 2 – True or False?

	True / False
a.	F
b.	T
c.	T
d.	F
e.	T
f.	T
g.	F
h.	T
i.	T
j.	T
k. Other way round	F

Task 3 – Explain...

- Bilateral trade agreements are those between two countries and have greater flexibility; Multilateral trade agreements are between more than two nations and are therefore far more complex.
- More competition facing domestic firms; Existing large customer base means these countries enjoy economies of scale; Trade diversion could also lead to job losses.
- MNCs can locate overseas and export without trade barriers from other member countries of the Free Trade Area; MNCs can gain easier access to a larger market; Larger scale production can lead to economies of scale (via trade creation).
- It is a common market; the monetary system in the union is governed by a central bank; Convergence of interest rates; Convergence of monetary and fiscal policies; For full monetary union, a single (common) currency is used.

Task 5 – Multiple Choice

- C. Taxes
- C. Enjoy economic independence
- A. Area, Barriers
- A. Customs union
- A. Free trade and free movement of labour and capital between member countries
- B. An increased customer base, meaning the potential to exploit economies of scale
- C. Common market
- B. No tariff charges on selected goods for members, but each country keeps its own tariffs towards non-members

- B. Tariffs are removed rather than lowered
- B. Harmonization of taxes
- B. There is flexibility in exercising monetary policy
- D. Increased labour mobility
- D. The establishment of a common currency across all members of the trading bloc
- A. Give special (favoured) access to certain goods from certain countries
- D. Economic welfare amongst member countries can diminish as prices of goods and services rise with the formation of a free trade area
- B. Economies of scale (*HL Only*)
- C. Trade diversion (*HL Only*)
- C. Trade creation takes place (*HL Only*)
- A. Opportunities for specialization
- B. Trade diversion (*HL Only*)

Chapter 40

3.5 Terms of trade (*HL Only*)

Task 1 – Complete the missing words

- export
import
exchange
price
reduce
lowers
worsening
price
increase
current
more
higher
- index
currencies
- 17,095 / 17,805
1,450
113.8
113.8 / 90.2
90.2 / 113.8
improved
- prices
exchange
improving
worsen

- income elasticity of demand
productive
elastic

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	T
d.	F
e.	F
f.	F
g.	T
h.	T
i.	T
j.	T
k. Relatively higher exports prices are not necessarily beneficial to the economy	F

Task 3 – Multiple Choice

1. A. An average of export prices divided by an average of import prices, expressed as an index number
2. A. Exports increase
23. C. 116.5

3. A. Export, import, improve
4. C. Fluctuations in the exchange rate are a short term cause of changes in the terms of trade
5. D. Changes in technological developments within the country
6. B. The terms of trade in India and Thailand will both worsen
7. A. Have a deflationary effect, causing export prices to fall and hence worsening the terms of trade
8. B. Export prices divided by the index of average import prices * 100
9. B. The elasticity of demand is highly price inelastic
10. A. Imports increase in volume
11. B. Increased supply of export goods which have a low price inelasticity of demand
12. A. The terms of trade will improve in the short-term for oil-rich countries such as Kuwait
13. D. Inflation in the domestic economy which causes the average price of exports to rise relative to the average price of imports
14. C. There is an unfavourable impact on the balance of payments current account Not necessarily as it depends on the PED for both exports and imports
15. D. Foreign debts are likely to fall for countries dependent on foreign imports
16. D. Higher priced imports can generate expenditure switching in the domestic economy
17. A. 0.375
18. B. The terms of trade have improved by less than 4%
19. A. Demand for exports is relatively price inelastic
20. A. More exports are needed to pay off the loans following a deterioration in the terms of trade
21. D. Higher import consumption
22. A. Higher costs of debt servicing because a larger quantity of exports are needed to repay foreign debt

Year	Price of sugar exports (\$ per unit)	Index number (sugar)	Price of cotton imports (\$ per unit)	Index number (rice)	Terms of trade
2010	486.8	93.5	92.0	57.3	163.2
2011	520.8	100.0	160.6	100.0	100.0
2012	606.5	116.5	82.2	51.2	227.5

24. C. 163.2
25. B. Improved from 163.2 to 227.5

Chapter 41

4.1 Economic development - the nature of development

Task 1 – Complete the missing words...

- gross domestic product
- gross national product
- quality
- exchange
- raw
- large
- amenities
- distribution

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	T
e.	T
f.	F
g.	T
h.	F
i.	T
j.	T

Task 3 – Explain...

- a. Economic development is multidimensional, so considers development in terms of reduced poverty, improved standards of living, reduced income inequalities and better employment opportunities.
- b. When there is greater income inequality from a rise in real GDP per capita; When productivity gains and increases in GDP are caused by the use of automation (and hence a rise in technological unemployment); When growth creates negative externalities such as pollution.
- c. It can reduce a relatively large increase in real GDP into a small increase in real GDP per capita; Competing pressure of the planet's scarce resources;

Can lead to overutilization (and hence ecological degradation) of agricultural land.

- d. Greater (fairer) distribution of income and wealth; Greater access to basic amenities such as clean water; Lower population growth (and hence higher GDP per capita); Composition of GDP, e.g. national defense vs. merit goods; Health technology and life expectancy.
- e. Whilst both concepts are affected by the level of income, the cost of living depends on the rate of change of prices (inflation) and the standard of living will partly depend on inflation but also many other factors, such as political and economic freedom, access to education and the state of health technology; COL (cost of living) is quantitative, whereas SOL (standard of living) is both quantitative and qualitative.

Task 5 – Multiple Choice

1. B. Negative economic growth
2. A. An increase in real GDP per capita over time
3. D. Per capita income
4. C. Economic development
5. B. Economic growth
6. A. Development that meets the needs of the present generation without compromising the ability of future generations to meet their needs
7. D. Rapid improvements in literacy and education
8. C. Primary sector employment
9. A. Low rates of economic growth and relatively high rates of population growth
10. B. Increase by \$840
11. A. Increased by about \$75
12. B. 7 – 8 years
13. B. Trade negotiations
14. C. High saving rates
15. D. Goals are easily measurable for each member country
16. D. National defense expenditure
17. A. The best-educated workers emigrate from the LEDC to a MEDC
18. A. The outflow of financial capital from a particular country
19. C. Low per GDP per capita causes low levels of saving and investment, leading to low productivity and hence low incomes
20. D. High population growth

Chapter 42

Economic development – Measuring development

Task 1 – Matching exercise

1, c
2, e
3, h
4, f
5, g
6, b
7, d
8, a

Task 2 – True or False?

	True / False
a.	T
b.	T
c. This is why PPP is used	F
d.	F
e.	T
f.	T
g. Not necessarily, e.g. Kuwait and Qatar have a higher GNI per capita than the USA, but a lower HDI	F
h.	F
i.	T
j.	T
k.	T
l.	T

Task 3 – Multiple Choice

- D. Increases in GDP over time, accompanied by changes in to people’s wellbeing
- D. Human Development Index
- B. Purchasing power parity
- A. Gross national income per capita, adjusted for differences in the cost of living between countries
- A. Include more than one measure of economic development
- C. Equal its GNI

- D. Gender participation rates and gender inequalities
- C. Multidimensional poverty
- A. Gross national income per capita
- C. Access to basic education
- D. Standards of living measured by gross domestic product per capital, adjusted for purchasing power parity across countries No, the HDI use GNI (not GDP) per capita, including PPP
- A. GNI exceeds GDP
- C. 15 locks If 1 ville = 5 locks, then 3 villes = 15 locks
- B. Australia, Brazil, India, Sierra Leone
- C. Luxembourg, Hong Kong, Portugal, Swaziland
- B. GNI, HDI
- D. Economic growth but not higher quality of life
- A. The inability to distinguish between growth and development This is not the purpose of the HDI
- D. The need to use complex composite indicators to measure development The HDI only uses three dimensions (education, health and income)
- D. Human development index

Chapter 43

4.3 Economic development – The role of domestic factors

Task 1 – Complete the missing words...

- supply
- supply
- production possibility curve
- primary
- development
- money
- standards
- long run aggregate supply
- borrow
- small
- low
- non-government organizations
- banks
- NGOs
- positive
- discrimination
- micro
- development
- half
- lower
- population
- inequality
- distribution
- small
- large
- low
- foreign direct

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	T
d. Some may be in the form of barter or payments made in kind, so are not illegal	F
e.	T
f.	T
g.	T
h. Neither are considered as being more important	F
i.	T
j.	T

Task 3 – Explain...

- a.
- It reduces trust between individuals, organizations and governments
 - It is a deterrent to foreign direct investment
 - It encourages government officials to award contracts to those who bribe officials and often act in illegal ways
- b.
- The timeframe involved in micro-credit schemes may put added pressure on individuals striving to make a living for themselves and their families
 - There is over-regulation in many LEDCs, leading to economic inefficiencies rather than economic development
 - Political instability and conflict can bring a halt to any progress made in economic development
 - Cultural and historical issues mean that women are not given the same opportunities as men, thereby hindering economic development and prosperity to LEDCs
- c.
- An inward shift of the production possibility curve (damage to infrastructure and hence the productive capacity of the country)
 - Displacement of the population, with the likelihood of a change in gender distribution
 - Lower standards of living
 - The likelihood of lower foreign direct investment in the country
 - Foreign aid may also decline during a civil war

- d.
- High interest rates are charged by commercial lenders to compensate the risk of lending to poor people who are on low incomes and usually not credit-worthy
 - Borrowers also lack financial security (collateral for the loan) in case they default on the loan, so lenders are cautious with the money they lend
 - Micro entrepreneurs are highly vulnerable to shocks (unexpected changes) in the economy (e.g. a sudden fall in customer demand or adverse weather conditions affecting supply); such businesses may not be sustainable, so do little for economic development
 - Micro entrepreneurs have limited skills, qualifications and experience due to the limited opportunities and access to education; hence there is a tendency for misuse or misallocation of resources and a higher rate of business failure
 - Due to their unstable income of being self-employed, many entrepreneurs choose to take jobs at factories as there is greater financial stability; thus this defeats the purpose of micro-credit schemes

Task 4 – Multiple Choice

1. D. All resources that help the growth and development of a country
2. D. Whether the funds are to be used for profit-making projects
3. B. Loans of small amounts to poor individuals, organizations and governments
4. A. They do not create jobs on a large enough scale to shift the productive capacity of the economy
5. A. International agencies such as Oxfam and the IMF cannot operate effectively without political stability
6. D. Innovation and technology are essential for growth and development
7. C. They enhance both gender equality and income distribution
8. B. LEDCs prefer labour-intensive technologies to capital-intensive technologies for economic development
9. C. It limits both the quantity and quality of labour in the production process
10. A. They all have positive externalities for LEDCs

Chapter 44

Economic development – The role of international trade

Task 1 – Matching exercise

1, g
2, d
3, e
4, i
5, b
6, j
7, h
8, a
9, c
10, f

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	T
d. It involves protectionist measures, rather than importing goods and services	F
e. They tend to over-specialize in the output of a limited number of goods and services	F
f.	T
g. The TOT are likely to deteriorate	F
h.	T
i.	T

Task 3 – Multiple Choice

- D. It involves imposing tariffs on non-member countries of a free trade area
- B. Import substitution
- B. World Trade Organization
- C. Infant industries would have a stronger chance of survival under an export-led strategy
- D. Monopoly power of domestic firms
- D. Member states can impose tariffs and non-tariff barriers to non-member countries

- C. Foreign goods from the partner country may be much more attractive to the consumer
- C. Import substitution
- D. Trade diversion between the partner countries
- B. Wealthier nations such as Germany have had to bail out weaker partners such as Portugal, Italy, Greece and Spain during the euro currency and debt crisis
- C. Trade disputes are independently and constructively handled between the member countries themselves
Trade disputes are handled by the WTO
- C. The demand for primary sector products tends to be highly income inelastic
- D. Higher demand-pull inflation in the LEDCs
- B. Demand for primary sector output is price inelastic in demand
- A. Protectionist measures imposed by MEDCs in trading blocs such as the European Union (EU) and the North America Free Trade Agreement (NAFTA)
- A. Support of domestic agricultural schemes by subsidizing their own farmers
- D. Reduced bargaining power with more economically developed countries
- C. Organization of Economic Cooperation and Development (OECD)
- D. Regional preferential trade agreements rather than multilateral trade agreements
Regional preferential trade agreements can be multilateral (*HL Only*)
- D. Lead to lower levels of unemployment in the LEDC
Unemployment is likely to rise as deteriorating terms of trade limit growth and development (*HL Only*)

Chapter 45

Foreign Direct Investment and Multinational Corporations

Task 1 – Complete the missing words

- other
- two
- natural
- lower
- decreased
- owners
- non-price
- development

Task 2 – True or False?

	True / False
a.	T
b.	T
c.	F
d.	T

e.	T
f.	T
g. Other way round	F
h. Other way round	F
i.	T
j.	T
k.	T

Task 3 – Explain...

- a. FDI is the long-term capital expenditure of a business or organization into another country, e.g. Toyota, Nissan and Honda's production plants in the UK and USA.
- b. Increased customer base; Opportunities to exploit economies of scale, including risk-bearing economies; Access to lower costs of production in overseas markets; Benefits from free trade areas, including the avoidance of protectionist measures such as tariffs and quotas; Logistical reasons, such as shorter delivery times, e.g. British produced Toyota cars can be exported to the whole of the EU, rather than having them exported from Japan; Lower taxes on factor resources and other financial incentives are often offered to firms to attract FDI.
- c.
- Potential exploitation of local labour (e.g. long hours, manual work and poor working conditions)
 - Pressures imposed on LEDC governments to give tax breaks and other financial incentives, e.g. grants, subsidies and cheap rents
 - Possibility of putting local firms out of business (the crowding-out effect)
 - Environmental degradation and depletion of non-renewable resources in the LEDC
 - Profit repatriation acts as a leakage from the circular flow of income from the LEDC
- d.
- There is the potential of huge job opportunities and their multiplier effects on the LEDC
 - Wages, albeit low compared to those paid in the MNC's home country, are often higher than those paid by local firms
 - Potential for huge tax revenues, including personal income tax and corporation tax
 - Workers gain access to the latest technologies and management practices of MEDCs, and putting pressures on domestic firms to adopt the same technologies and management practices to remain competitive
 - Technology transfer from MEDCs to LEDCs
 - FDI and the presence of MNCs help to increase productivity in the economy.

Task 4 – Multiple Choice

1. A. Multilateral aid
2. C. Economic development
3. B. McDonald's opening a production plant in Indonesia
4. C. Wages in LEDCs rising above subsistence levels
5. D. The nature and scale of infrastructure in less economically developed countries
6. C. MNCs involved in extracting natural resources in LEDCs are unlikely to leave once the resources are exhausted
7. B. Foreign direct investment
8. D. Environmental degradation
9. A. Pose a threat to the cultural, political and economic identity and strength of developing nations
10. C. FDI does not improve the human capital development in the LEDC

Chapter 46

The roles of foreign aid and multilateral development assistance

Task 1 – Vocabulary Quiz: Types of aid

Key Terms
Bilateral foreign aid
Development aid
Humanitarian aid
Multilateral foreign aid
Official development assistance (ODA)
Program aid
Tied aid

Task 2 - True or False?

	True / False
a.	T
b.	F
c.	T
d.	T

e. LEDCs tend to have a current account deficit due to the import of high value-added capital goods which cannot be matched by their low value-added exports	T
f.	T
g.	T
h. Bilateral aid instead	F
i.	T
j.	T
k.	T

Task 3 – Explain...

- a.
- It can create economic dependence on the donor(s) and MEDCs
 - Corrupt governments in LEDCs cause foreign aid to be misused; It encourages decision making from central government rather than local projects that benefit local communities
 - Donations from MEDCs are both insufficient and in decline (as a percentage of their GDP)
 - LEDCs often argue for trade on more favourable terms, rather than outright aid to fuel development (the argument that it is better to give LEDCs fishing rods than simply to give them fish)
 - Aid may involve political interferences rather than economic priorities
 - The type of aid is not always appropriate, e.g. it may promote capital-intensive projects rather than labour-intensive projects which are better suited for the country; similarly, tied aid suggests a loss of economic freedom (of choice)
- b.
- Aid can be used to increase the productive capacity of the economy, and hence economic growth
 - LEDCs can be a stimulus for reducing or eliminating poverty, inequality and unemployment
 - Aid represents an injection to the circular flow of income for LEDCs that enables investment and economic growth
 - Aid can help the transmission of new ideas, innovations, technologies and processes
- c. Answers could include an explanation of:
- Tied aid / bilateral aid
 - Untied aid / multilateral aid
 - Concessionary loans – loans with comparatively

lower interest rates than commercial banks, with a longer lending period

- Grants – government financial assistance that does not need to be repaid
 - Aid in the form of money/donations, goods and/or technology transfer
- d. Foreign Direct Investment (FDI) involves overseas investments made by multinational corporations (MNCs). By contrast, foreign aid is either a bilateral or multilateral financial assistance (as donations, loans or credit at below market rates. FDI increases the productive capacity of the country whereas foreign aid does not necessarily do so.

Task 4 – Multiple Choice

1. C. Protectionist measures
2. D. Assistance for infrastructure development programs
3. A. World Bank
4. B. Shift the recipient country's production possibilities the right
5. C. Non-governmental organizations (NGOs)
6. D. Employment opportunities
7. D. It attempts to fix exchange rates between member states
8. A. Tied aid
9. A. It ensures financial aid is used for appropriate purposes whilst benefiting the donor country
10. A. Official aid
11. D. To aid countries following an economic downturn in their economy
12. D. Humanitarian aid
13. B. Loan with comparatively lower interest rates than commercial banks, lent over a long period of time
14. C. Non-governmental organizations
15. D. Make finance available to members to meet their balance of payments needs

Chapter 47

The role of international debt

Task 1 – Complete the missing words...

external
 International Monetary Fund
 World
 higher
 reduces
 reschedule
 external/foreign
 taxpayers
 HIPCs
 corrupt
 relief

Task 2 – Vocabulary Quiz

Key term
Conditional assistance
Creditors
Foreign debt
Heavily indebted poor countries (HIPC)
International Monetary Fund (IMF)
World Bank

Task 3 – Explain...

- a. Internal debt refers to the money owed by a country to its people because the government runs a budget deficit (government expenditure exceeds government revenues). By contrast, external debt is money owed to foreign governments and international finance agencies.
- b.
- Increased interest rates – limited access to money means the price of borrowing is usually high, but this also leads to the cost of debt servicing being increased.
 - As the cost of debt servicing goes up, it leaves insufficient funds for basic provision of services such as education, healthcare, infrastructure developments and sanitation projects.
 - Highly indebted countries import far less than they need from MEDCs as there is a long term decline in the real value of their own exports and currencies
 - The debt-to-GDP ratio of LEDCs rises because a larger proportion of their national income is debt, creating an opportunity cost in terms of lost expenditure
 - The debt-service ratio of LEDCs rises, meaning there is greater pressure on export revenues to be used to repay debt plus interest repayments – a real problem if export earnings are not rising in real terms
 - Quite often, the rescheduling of debt repayments or the failure to repay debts causes a loss in the financial status of the LEDC, creating adverse effects on the future foreign investment in the country
 - The poorest countries do not have the resources to deal the negative externalities associated with economic growth
- c.
- High levels of indebtedness impede economic development of HIPCs
 - HIPCs have to use a large proportion of their export earnings to pay the debts (including the interest) so have little, if any, funds left over to finance economic development

- External factors beyond the control of HIPCs can fuel the soaring debts of HIPCs, such as natural disasters and oil crises (which cause inflation, and hence higher interest rates in global markets)

Task 4 - True or False?

	True / False
a.	T
b.	T
c.	T
d. It can be but not necessarily	F
e.	T
f.	T
g.	T
h.	F
i.	F
j.	T

Task 5 – Multiple Choice

1. B. Focus resources on combating inflation rather than repaying debt
2. C. Debt service ratio
3. A. Domestic inflation means that foreign debts become harder to repay as the value of money decreased yet the debts have to be repaid in foreign currencies
4. C. Debt servicing does not necessarily deal with other causes of poverty in LEDCs such the need for trade liberalization policies
5. C. Complacency sets in as LEDCs may expect future debts to also be wiped out
6. A. A country takes out subsequent loans to service (pay for) older debts
7. B. Existing debt is so high that the HIPC finds it extremely difficult to borrow more money
8. C. When the borrowing nation becomes classed as a highly indebted poor country (HIPC)
9. B. It makes long term loans to LEDCs to aid their economic development
10. D. HIPC debt relief requires nations to focus on eradicating corruption rather than poverty reduction programs

Chapter 48

The balance between markets and intervention

Task 1 – Matching exercise

1, c
2, d
3, e
4, j
5, h
6, i
7, k
8, b
9, a
10, g
11, f

6. A. Progressive tax systems to create incentives to work
This is an interventionist supply-side development policy
7. A. Can increase inequalities and relative poverty
8. D. Interventionist policies are free of bureaucracy and corruption
9. D. Applies to actions of government official only
Applies to anyone or organization in a position of responsibility with decision-making power, e.g. NGOs, the military, research institutes and religious leaders
10. D. The social safety net can be achieved without the need for government intervention

Task 2 - True or False?

	True / False
a.	F
b.	T
c.	T
d.	T
e. It is unlikely corruption can be eradicated, but development occurs when it is reduced.	F
f.	T
g.	T
h.	T

Task 3 – Multiple Choice

1. D. Equal income distribution
2. A. Provide quality infrastructure (roads, ports, airports and telecommunications networks) This also helps to encourage foreign direct investment
3. D. Income inequalities This is a weakness of market-based policies
4. A. Provide adequate housing to many members of society (Option B is a market-based policy)
5. D. Free market economy