1	–	D	**(1)**

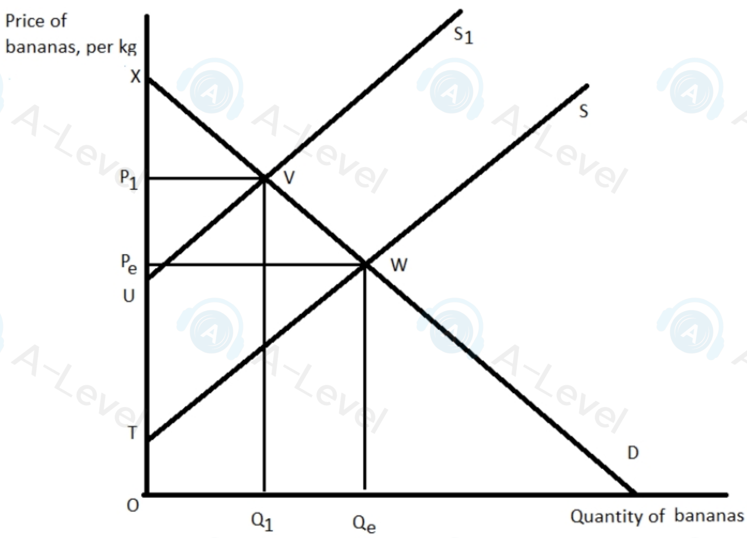
1	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** **A** is not correct because this is an example of asymmetric information **B** is not correct because this is an example of asymmetric information **D** is not correct because market failure occurs when there is asymmetric information	**(1)**

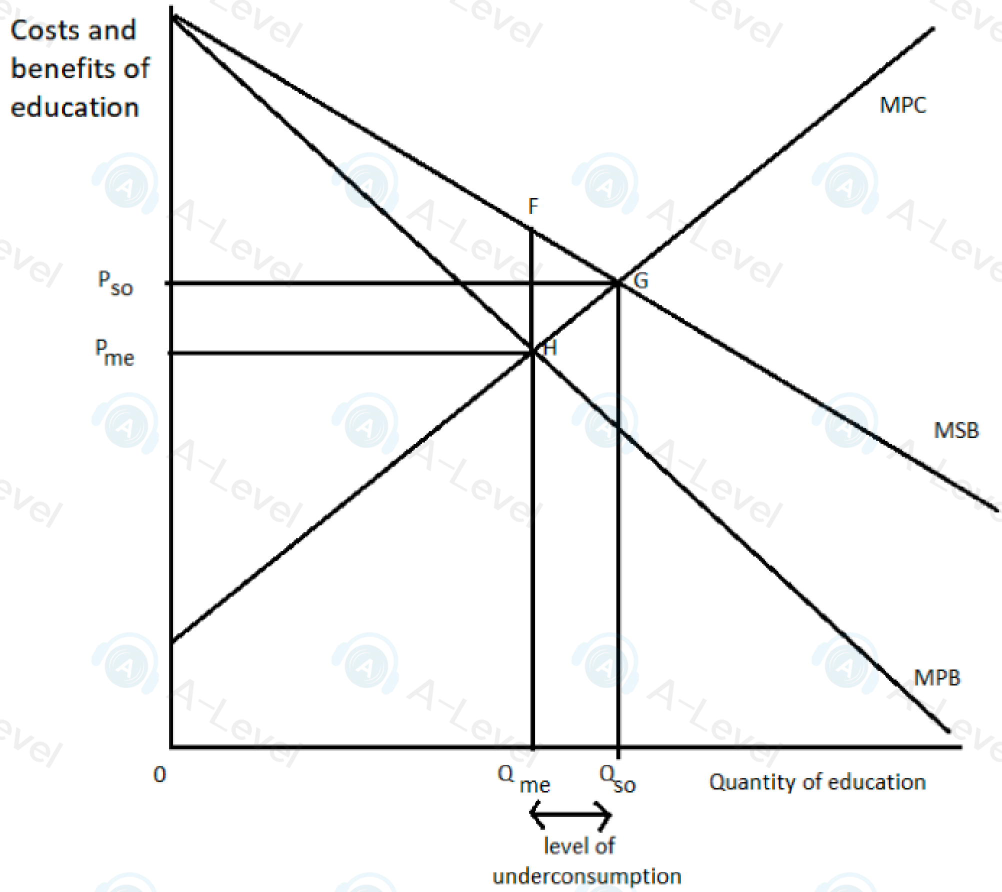
1	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is C** **A** is not correct because this occurs when there is increasing marginal utility **B** is not correct because diminishing marginal utility is not related to the supply curve **D** is not correct because diminishing marginal utility means the utility will rise at a slower rate as more of the product is consumed	**(1)**

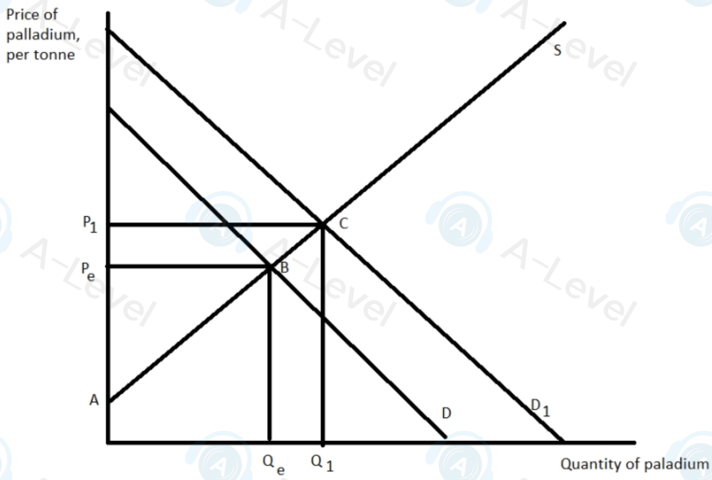
2	**QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is D** **A** is not correct because the maximum price is below the equilibrium so resulting in excess demand, not excess supply **B** is not correct because the maximum price is below the equilibrium so resulting in excess demand, not excess supply **C** is not correct because the higher price results in a contraction of demand and an extension of supply so excess demand decreases	**(1)**

5	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms	**The only correct answer is B** **A** is not correct because if consumers experienced habitual behaviour they would remain with their existing supplier **C** is not correct because if consumers are poor at computation, they would not be able to calculate their savings from switching **D** is not correct because a rational consumer maximises utility	**(1)**

1	–	B	**(1)**

Question	Between January 2020 and May 2020 the price of bananas charged by retailers in the USA increased from \$1.17 to \$1.30 per kg. This was mainly caused by increased costs of transportation from banana growers to markets in North America. Explain the likely impact of this change in price on consumer surplus. Illustrate your answer with a diagram. **Answer**	Mark
11	**Knowledge 1, Application 1, Analysis 2** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **Knowledge** 1 mark for defining consumer surplus • Consumer surplus is the difference between the price which consumers are willing to pay and the market price/gap between the equilibrium price and the demand curve **(1)** **Application** 1 mark for the following diagram, showing the correct shift in supply  **Analysis** Up to 2 marks for likely impact on consumer surplus • Consumer surplus is originally P_eWX **(1)** • Consumer surplus decreases **(1)** to P_1VX **(1)** • Consumer surplus decreases **(1)** by P_eP_1VW **(1)**	**(4)**

Question	In 2021 the number of citizens taking online education courses in the Philippines was 1 300 000. Draw a diagram to illustrate the likely external benefits resulting from online education in the Philippines. **Answer**	Mark
7	**Knowledge 1, Application 3** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for showing knowledge on diagram • Downward sloping MSB above MPB **(1)** **Application** Up to 3 marks for the following information included on diagram: • Market equilibrium price **and** quantity **(1)** • Social optimum price **and** quantity **(1)** • Welfare loss/welfare gain area FGH/ size of external benefit FH/ level of underconsumption Qme - Qso **(1)** **(allow underprovided)**  **NB accept a parallel shift of MPB to MSB**	**(4)**

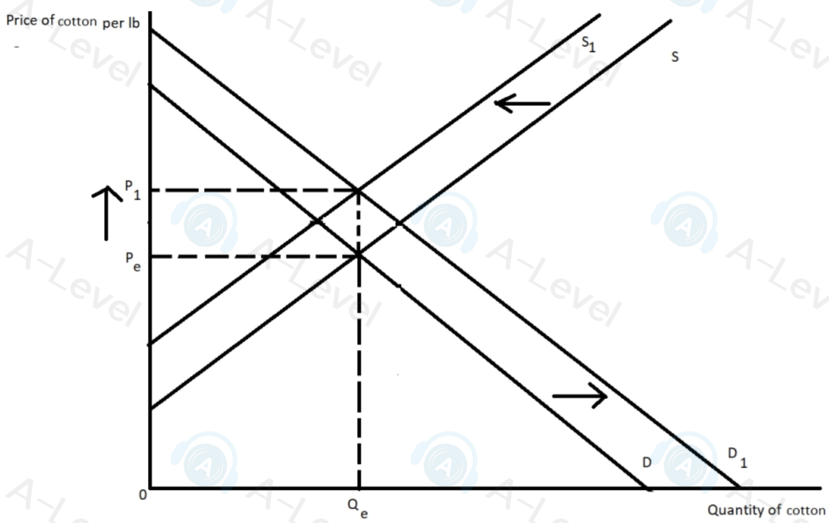
Question Number	Answer	Mark
11	**Knowledge 1, Application 1, Analysis 2** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for defining producer surplus, e.g.: • Producer surplus is the difference between the price which producers are willing to sell at and the market price/ • Difference between market price and lowest price firms are willing to accept **(1)** **Application** 1 mark for the following diagram, showing the correct shift in demand  **Analysis** Up to 2 marks for likely impact on producer surplus: • Producer surplus is originally ABP_e **(1)** • Producer surplus increases to ACP_1 **(1)** • Producer surplus increases by P_eBCP_1 **(1)**	**(4)**

Question	With reference to Lake Chad, explain the difference between a free good and an economic good. **Answer**	Mark
8	**Knowledge 2, Application 2** Quantitative skills assessed: **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** 1 mark for understanding of 'free good', e.g. - Free good is a resource which is so abundant that its availability is not a constraint on economic activity/in unlimited supply/a good with no opportunity cost/good does not have a price **(1)** 1 mark for understanding of 'economic good', e.g. - Economic good is a good that derives utility/a good with scarcity and therefore an opportunity cost/scarcity means people may be willing to pay for it **(1)** **Application** 1 mark for reference to Lake Chad as a free good in 1960, e.g. • In 1960 water from the lake was a free good/lake used to provide irrigation to farmers for their crops suggesting free good **(1)** 1 mark for reference to Lake Chad as an economic good in 2017, e.g. • By 2017 the farmers could no longer use the lake for irrigation suggesting it is an economic good/has an opportunity cost **(1)**	**(4)**

Question	*Ceteris paribus*, calculate the price elasticity of supply for olive oil. Show your workings. **Answer**	Mark
10	**Knowledge 1, Application 3** Quantitative skills assessed: **QS8:** Make calculations of elasticity and interpret the result. **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge** 1 mark for definition/the formula price elasticity of supply $\frac{\text{\% change in quantity supplied}}{\text{\% change in price}}$ **(1)** **Application** Up to 3 marks for calculations: • Change in quantity supplied • 3.27 - 2.93 = 0.34 Change in quantity ÷ original quantity x 100 0.34 ÷ 2.93x 100= 11.60% **(1)** • Change in price 5 145 - 4 125 = 1 020 Change in price ÷ original price x 100 1020 ÷ 4 125 x 100= 24.73% **(1)** $\frac{\text{\% change in quantity supplied}}{\text{\% change in price}}$ 11.60 ÷ 24.73 = 0.47 **(1)** **NB: if correct answer (e.g. 0.47, 0.469, 0.4690659) is given, award full marks regardless of working.** **Accept reasonable rounding from full calculation** **If 0.47% or -0.47 is given award 3 marks** **Where the proportions are calculated for the change in quantity supplied or price award 1 mark for each (e.g. 0.116 and 0.2473)**	**(4)**

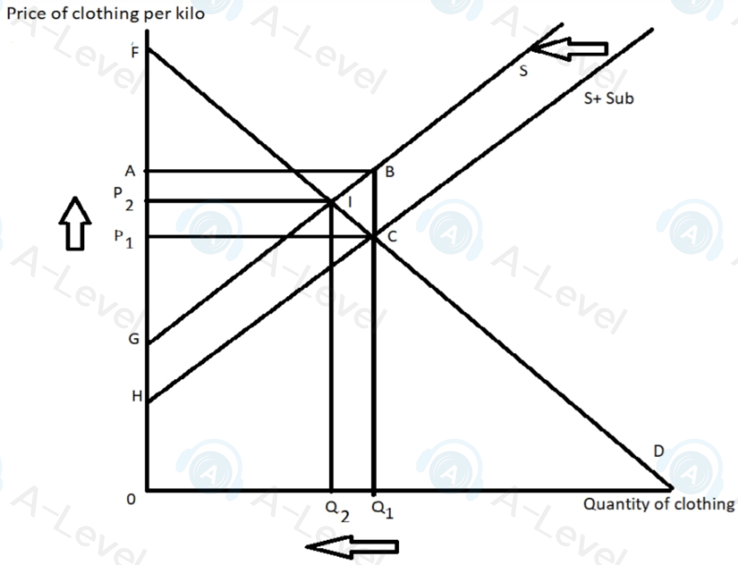
Question	Define the term 'indirect tax' (Extract B, line xx). **Answer**	Mark
12 (a)	**Knowledge 2** 1 mark for: • Expenditure/sales/consumption tax/tax added to the price of a good **(1)** And 1 mark for any 1 of the following: • Paid to the government through a third party **(1)** • Could be ad valorem or specific tax **(1)** • Increases costs **(1)** • Decreases supply **(1)** • Used to discourage consumption **(1)** • Examples of indirect taxed including VAT/excise duties/customs duties **(1)** • Ireland plans to introduce an indirect tax on clothing **(1)**	**(2)**

Question	With reference to the **titles** of Extract A and Extract B, explain the difference between positive statements and normative statements. **Answer**	Mark
12 (b)	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge 2 Application 2** **Knowledge** 1 mark for definition of positive statements: • Based on facts/can be proven with evidence/value free/ objective/scientific approach to decision making **(1)** 1 mark for definition of normative statements: • Based on value judgments/not based on facts/cannot be proven with evidence/ subjective/non-scientific approach to decision making **(1)** **Application** Up to 2 marks for application: • 'World cotton price rises' is a positive statement as the price data/Figure1 can be used to prove prices rose **(1)** • 'Clothing manufacturers should reduce environmental costs' is a normative statement as indicated by reference to 'should' **(1)**	**(4)**

Question	With reference to Figure 1 and Extract A, analyse **two** reasons why between 1st April 2020 and 1st January 2021 the world price of cotton increased. Illustrate your answer with a supply and demand diagram. **Answer**	Mark
12 (c)	**Knowledge 2, Application 2, Analysis 2** Quantitative skills assessed: **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge** Up to 2 marks for the diagram showing: • Original supply, demand and equilibrium **(1)** • Final equilibrium showing higher equilibrium price and change in quantity **(1)** **Analysis** Up to 1 mark for analysis linked to demand factor e.g.: • Increased demand for cotton as more demand for masks/bedsheets/surgical gowns/for healthcare **(1)** Up to 1 mark for analysis linked to supply factor e.g.: • Pakistan crop decreased/decrease in amount of cotton produced/high temperatures in Pakistan **(1)** **Application** 1 mark for application to Figure 1 • Price increased from \$0.54 per lb to \$0.80 per lb between 1 April 2020 and 1 January 2021 Up to 2 marks for diagram: • Rightwards shift in demand **(1)** • Leftwards shift in supply **(1)**	
		
	NB: Quantity may rise or fall dependent on size of shifts in S and D	**(6)**

Question	With reference to Extract B, examine **two** external costs associated with the production of clothing. **Answer**	Mark
12(d)	**QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms **Knowledge 2, Application 2, Analysis 2, Evaluation 2** **Application, Knowledge and Analysis** Up to 2 marks for reference to Extract B and up to 2 marks for identifying two effects and up to 2 marks for linked explanations , e.g.: • Definition of 'external costs' – negative impacts on third parties outside a transaction **(1K)** • Jeans use 3 781 litres of water **(1Ap)** leaving less for drinking water **(1K)** which may push up prices of drinking water **(1An)** • Jeans produce 33.4kg of carbon emissions **(1Ap)** which are greenhouse gases contributing to global warming **(1K)** which may cause rising sea levels/flooding **(1An)** • Globally clothing manufacturing uses 93 billion cubic metres of water **(1Ap)** leaving less clean water for water companies **(1K)** which may mean more needs spending on water treatment **(1An)** • Clothes dyeing produces 20% of waste-water **(1Ap)** which may need cleaning by water companies **(1K)** adding to their costs which are passed on as higher prices to consumers **(1An)** • Burning clothing **(1Ap)** causes air pollution which may cause breathing difficulties **(1K)** and costs to health services **(1An)** • Clothing manufacturers produce 10% of annual global carbon emissions **(1Ap)** which contribute to global warming **(1K)** which may make it difficult to farm certain crops as the weather is no longer ideal **(1An)** **1 A mark for a correctly drawn external costs of production diagram**	
	Evaluation Up to 2 marks for evaluative comments, e.g.: • Magnitude of costs- 93 billion cubic metres is a significant number **(1+1)** • Measurement – it is hard to measure the size of external costs- e.g. the value placed on clean air/water **(1+1)** • Manufacturing countries will experience higher levels of external costs **(1+1)** • May be substantial external benefits- employs 75 million people who spend money where they live boosting the economy **(1+1)**	**(8)**

Question	With reference to Extract C, discuss the impact of the removal of the subsidy paid to Indian clothing manufacturers on consumers and manufacturers. Illustrate your answer with an appropriate diagram. **Indicative content**
12(e)	**Indicative content guidance** Answers must be credited by using the level descriptors (below) in line with the general marking guidance. The indicative content below exemplifies some of the points that candidates may make but this does not imply that any of these must be included. Other relevant points must also be credited. **Quantitative skills assessed** **QS4**: Construct and interpret a range of standard graphical forms **QS9**: Interpret, apply and analyse information in written, graphical, tabular and numerical forms. **Knowledge, Application and Analysis (8 marks) – indicative content** • Subsidy- cash grant paid to encourage production • Removal of subsidy- increases costs of production • Decreases supply S+Sub to S • Increases price P_1 to P_2 • Decreases quantity Q_1 to Q_2 • Reduced government spending $ABCP_1$ • Consumer surplus falls from FCP_1 to FIP_2 • Producer surplus falls from CHP_1 to GIP_2 • A risk to the 35 million who work in clothing manufacturing in India • Unemployment in the Indian clothing industry • Clothing exports from India may fall from their current level of 12% of total exports • US and Turkish clothing manufacturers will be able to better compete with Indian clothing manufacturers • After being protected Indian firms may be uncompetitive • Money saved can be reallocated to health and education Diagram



Consumers and manufacturers must both be considered to achieve level 3.

	Mark	Descriptor
	0	No rewardable material
Level 1	1–3	Displays isolated, superficial or imprecise knowledge and understanding of economic terms, principles, concepts, theories and models. Use of generic material or irrelevant information or inappropriate examples. Descriptive approach, which has no chains of reasoning.
Level 2	4–6	Displays elements of knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to apply knowledge and understanding to some elements of the question. Some evidence and contextual references are evident in the answer. Chains of reasoning in terms of cause and/or consequence are evident but they may not be developed fully or some stages are omitted.
Level 3	7–8	Demonstrates accurate and precise knowledge and understanding of economic terms, principles, concepts, theories and models. Ability to link knowledge and understanding in context using relevant examples which are fully integrated to address the broad elements of the question. Analysis is clear, coherent, relevant and focused. The answer demonstrates logical and multi-stage chains of reasoning in terms of cause and/or consequence.

Evaluation (6 marks) – indicative content

- Magnitude- no data on the size of the subsidy being removed
- Impact on Indian firms may depend on whether demand is price sensitive- if demand is inelastic then less impact/ depends if Indian clothing is demanded for its quality rather than price competitiveness
- Value of PED is important for the impact on consumers
- Higher production costs in Turkey and USA may mean firms in India remain price competitive even after removing subsidy
- Little impact on consumer surplus in India as many goods are exported

	• The fact 35 million people are employed in clothing suggests many Indian firms will perform well without the subsidy • Time lag- short run and long run impacts after subsidies removed • Reduced government spending will enable reduction in taxation/government spending elsewhere	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	Identification of generic evaluative comments. No supporting evidence/reference to context. No evidence of a logical chain of reasoning.
Level 2	3–4	Evidence of evaluation of alternative approaches. Some supporting evidence/reference to context. Evaluation is supported by a partially-developed chain of reasoning.
Level 3	5–6	Evaluation recognises different viewpoints and/or is critical of the evidence. Appropriate reference to evidence/context. Evaluation is supported by a logical chain of reasoning.