2003 Jan Unit 1 Mark Scheme

1 C 2 A 3 D 4 D 5 C
6 A 7 B 8 A 9 C 10 C

1 Answer C
Statement 1 expresses an opinion/makes a value judgement (1) about `justification' (1).
Statement 2 is a positive statement of fact (1).
If a wrong key is selected, but the explanation shows some understanding of positive and normative concepts award up to 2 marks.

2 Answer A
Internal economies of scale accrue to the individual firm (1) and occur when average costs fall as output increases (2).
Bigger plants bring cost savings and increased output through e.g. increased dimensions and technological gains (2)
If a wrong key is elected, but the explanation shows some understanding of internal economies of scale award up to 2 marks.

3 Answer D
Cross price elasticity of demand (XED) shows how the demand for a product is affected by a change in the price of another product (1).
For substitutes (road and rail travel) XED is positive (1): an increase in the price of a product causes an increase in the demand for the alternative (1).
For complements (road travel and petrol) XED is negative: an increase in the price of a good causes the demand for its complement to decrease (1)
If a wrong key is selected, but the explanation shows some understanding of: XED (1), substitutes (1), complements (1) up to a maximum of 2 marks

4 Answer D
Producer surplus is the difference between what the seller is prepared to charge and the higher market price (2), and is shown by the area above the supply curve and below the price line (2).
If a wrong key is elected, but the explanation shows some understanding of producer surplus award up to a maximum of 2 marks.

5 Answer C
A decrease in real incomes decreases the demand for a luxury good, and the demand curve shifts down from DID1 to D2D2. The exit of some firms decreases the supply of the good, and the supply curve shifts up from S 1 S 1 to S2S2. The new D and S curves establish a new equilibrium at C.
To gain 3 marks both shifts and the reasons for each must be made explicit.
If a wrong key is selected, but there is valid reasoning in the explanation, then award decrease in demand (1), decrease in supply (1), demand falls and supply falls (1) up to a maximum of 2 marks.

6 Answer A
Income elasticity of demand (YED) shows how the demand for a product is affected by a change in consumer income - or - YED formula (1).
The diagram shows that when income increases the demand for bus travel decreases (1) i.e., a negative relationship (1). Because the demand curve starts from the vertical (income) axis, YED is elastic (1) i.e., the change in the quantity demanded is proportionately greater than the change in income (1).
If keys B or D are selected, and the explanation shows some understanding of the YED concept or more generally of the relationship between demand and income, award up to a maximum of 2 marks.

7 Answer B
In a market economy resources are privately owned and are allocated (and perpetually re-allocated) by the price mechanism through the interaction of the market forces of supply and demand. Private/public ownership and market/state resource allocation coexist in a mixed economy.
While focusing upon the market economy, a valid explanation requires at least some comparative reference to key D and the mixed economy (3).
If the correct key is selected, but the explanation merely eliminates other keys and does not discuss key B (2)
If a wrong key is selected, but the explanation shows some understanding of the market economy (1) and/or the mixed economy (1), and resource allocation (1) up to a maximum of 2 marks.

8 Answer A
When the price of beef in year 1 is raised from OP1 to OP2, the quantity of beef demanded decreases from OQ1 to OQ2, i.e., when the price is increased, demand contracts and less is demanded at the higher price (1). At the same time the quantity of beef supplied increases from OQ1 to OQ3, i.e., when the price is increased supply expands and more is supplied at the higher price (1). In year 2 there is no further change in demand, but the government guarantee to buy surplus beef encourages farmers to increase supply; the supply curve shifts from S 1 S I to S2S2 and the quantity of beef supplied increases from OQ3 to OQ4 (2). The surplus in year 2 is the difference between the quantity supplied OQ4 and the quantity demanded OQ2 (1).
If a wrong key is selected, but the explanation shows some understanding of how demand and supply respond to price changes (1) and how price guarantee schemes operate (1) up to a maximum of 2 marks.

9 Answer C
A decrease in indirect tax on wine is shown by a new supply curve below the original supply curve (1). Production costs will fall, output will increase (1) and price will fall (1). The demand curve will remain unchanged (1).
Reward candidates who incorporate appropriate diagrams in their explanations

If a wrong key is selected, but the explanation shows some understanding of indirect taxes (1), their effect on the supply curve (1) and on the demand curve (1) and on price (1) up to a maximum of 2 marks.

10 Answer C
The PPF illustrates all the potential combinations of output of capital goods and consumer goods when all the economy's resources are fully employed (1).
Point Z is located inside the PPF and indicates the presence of unemployed resources (1).
Movement to point X on the PPF increases the output of both capital goods and consumer goods (1).
There is no sacrifice of one good for another (1).
If the wrong key is selected, but the explanation shows some understanding of the PPF (1) and of the concept of opportunity cost (1) up to a maximum of 2 marks.

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11 (a) Using a supply and demand diagram, explain why the price of coffee beans fell from £2 per pound to 50 pence per pound between 1997 and 2000.

Diagram showing shift in supply Quantity of coffee beans (2)
the price fall was caused by three bumper harvests which increased supply and created a coffee glut (2)

(b i) Calculate to one decimal place the percentage increase in the price of a tall black filter coffee at Starbucks
The price rose from £1-30 to £1-45:
$\frac{£0\text{-}15}{£1\text{-}30} \times 100 = 11.5\%$ 2

(B ii) Outline two reasons why 'high-street cafes recently raised the price, of most beverages by up to 15 pence'.
Increased milk prices
Higher rents
Exploiting demand/profiteering
Higher wage costs/national minimum wage rate
Increased business rates
Award up to 4 marks (2 x 2) for any two of the above or for any other valid reasons

(c) Outline one possible reason why`the high quality coffee beans rarely go up and down in price as drastically as the low quality mass-market beans'.(2)

Possible reasons include:
A smaller market with fewer and less significant changes in demand and supply
A more precisely planned approach to production resulting in a greater control over the quantity and quality of output
A more stable demand because consumers are better off and more discerning, and because expenditure on high quality coffee represents a relatively small proportion of both income and total expenditure.
Up to 2 marks for any reasonable explanation

(d) (i) With reference to the passage and other knowledge, examine the effects of: the fall in the price of coffee beans on coffee bar owners
Might reduce costs and increase profits, but
Coffee prices may be a relatively small proportion of the total costs of operating a coffee bar: the price of milk may be more important than the price of coffee
Larger companies may have stockpiled coffee when prices were higher and may still be operating on the basis of those higher coffee bean prices
Larger companies may use higher quality, more expensive coffee which is much less prone to price fluctuations
May depend on location, e.g., London, rents, rates, wages and other costs may be higher than in Nottingham
Little short-run impact, main effect in the long run
Award up to 4 marks for any one point depending on the quality of analysis and evaluation

(d ii) Analyse the impact of the increase in the price of a cup of Starbucks' coffee on the demand for tea:

It depends upon the cross price elasticity of demand for tea with respect to the price of a cup of coffee. If XED is positive (i.e., coffee and tea are substitutes) the demand for tea will increase. The extent of any increase will depend upon whether expenditure on coffee is small proportion of income, and whether coffee is seen as necessity - or as a luxury with many substitutes, including tea. If coffee and tea are close substitutes and XED is elastic, then the percentage increase in the demand for tea will be greater than the percentage increase in the price of a cup of coffee. Empirical evidence suggests that the substitution effect is relatively small and largely confined to low income earners. There is no mention of tea in the. passage; the only substitute referred to is a Bacardi Breezer. Candidates may take either view, provided they support it with valid reasons.
Award up to 4 marks for an answer with clear assumptions and valid analysis

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12 (a) OPEC has recently been having difficulty in keeping the price of crude oil in the range of $22 to $28 a barrel

(i) With the use of a supply and demand diagram, explain how the factors mentioned in paragraph 3 might `help support prices'. (3)

All of the following would decrease the supply of oil:
OPEC cutting production quotas by lm to 1.5m barrels a day (1)
War in Afghanistan interrupting supplies (1)
Iraq stopping oil exports (1)
Award up to 3 marks provided that the answer makes clear that the factors identified would affect the oil price through a decrease in the supply of oil.

(ii) With reference to the passage, outline one factor that might lead to a fall in oil prices.
OPEC members failing to agree a `reasonable price'
OPEC members cheating on production quotas Non-OPEC members refusing to co-operate in output restrictions
Decrease in demand/global recession/US recession
Award up to 2 marks for any one factor

(b) With reference to the passage and other knowledge, examine the effects of a successful attempt by oil producers to raise oil prices on:
revenues of oil-producing countries
(ii) oil-importing countries
The key issue is price elasticity of demand. The concept should be explained and then applied to analyse and evaluate how oil price changes affect the revenues of oil producers and oil importers. Diagrams might be used to illustrate arguments.
Relevant points include:
PED measures the responsiveness of the demand for a product to a change in its price. It can be calculated by the formula:
<u>percentage change in quantity demanded (of oil) </u>percentage change in the price (of oil)
Oil is a necessity and its demand is price inelastic, i.e. a change in price leads to a less than proportionate change in quantity demanded
The impact on producers is upon revenue. Since PED is inelastic, a rise in price will lead to an increase in revenue. (Where a price rise leads to a fall in output, there could be a rise in unit costs through some loss of economies of scale: however, because the fall in demand will be proportionately less than the increase in price, this point is much less significant than the revenue effect)
This means that when prices rise, importers can choose to buy less oil for the same expenditure or buy the same amount of oil for a higher outlay or opt for some intermediate position. But since oil is a necessity, the most likely outcome will be increased expenditure on imported oil. (Candidates are not required to comment upon balance of payments implications, but relevant comments may be rewarded).
There could be some switch to substitutes.
Award up to 3 marks for (b)(i) and 3 marks for (b)(ii) depending on the quality of analysis and evaluation.
Examine two factors that might explain why the price of petrol fluctuates less than the price of crude oil.
1 Competition between petrol companies and, in the UK for instance, from supermarkets may dampen down price increases.
Petrol companies may increase/decrease stocks to regulate supply and price.
The desire to maintain profits may limit the extent of price cuts.
Petrol taxes may be used to limit the extent of price cuts and to put a break upon price increases.
Award up to 6 marks on the basis of 3 + 3 or 4 + 2 depending on the quality of analysis and evaluation.