INSTRUCTIONS
• Use black ink. You may use an HB pencil for graphs and diagrams.
• Complete the boxes above with your name, centre number and candidate number.
• Read each question carefully before you start to write your answer.
• Sections A and B: Answer all the questions in each of these sections.
• Section C: Answer one question in this section.
• Write your answer to each question in the space provided. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
• Do not write in the barcodes.

INFORMATION
• The total mark for this paper is 60.
• The marks for each question are shown in brackets [ ].
• Quality of extended responses will be assessed in questions marked with an asterisk (*).
• This document consists of 20 pages.
SECTION A

Answer all the questions in this section.

Write your answer for each question in the box provided.

1 Which of the following is a function of money?
   A To act as an incentive to invest
   B To act as a standard of deferred payment
   C To be generally acceptable
   D To be widely recognisable

Your answer [ ]

2 What is it assumed that firms seek to maximise?
   A Income
   B Profit
   C Revenue
   D Utility

Your answer [ ]

3 Which of the following will cause an extension in demand for a product X?
   A A fall in the price of X if the price and quantity of X are inversely related
   B A fall in the price of Y if X and Y are substitutes
   C An increase in consumer preferences for X
   D An increase in income if X is a normal good

Your answer [ ]
In the diagram below, price rises from P1 to P2. What effect does this price movement have on consumer surplus?

- A Increases it to P1xz
- B Increases it by P2xy
- C Reduces it by P1xz
- D Reduces it by P1P2yz

Your answer

Profit is a payment to which factor of production?

- A Capital
- B Enterprise
- C Labour
- D Land

Your answer
6. Price elasticity of demand for a good will be determined by
   A. a consumer's level of income.
   B. the age distribution of the population.
   C. the availability of alternative products.
   D. the time it takes to produce the product.

   Your answer [ ]

7. Which of the following is an external economy of scale?
   A. Employment of specialist managers
   B. Falling average costs as a firm increases its output
   C. Improved rail connections to distant parts of the country
   D. Reduced input costs, as large firms can negotiate lower input costs

   Your answer [ ]

8. What is marginal social cost?
   A. Marginal external cost minus marginal private cost
   B. Marginal private benefit plus marginal external cost
   C. Marginal private cost plus marginal external cost
   D. Marginal social benefit minus marginal private cost

   Your answer [ ]

9. Income elasticity of demand for good X was 2.5. Income increased from £180 which caused demand to increase from 7800 to 9750. What was the new income?
   A. £194.40
   B. £198.00
   C. £225.00
   D. £292.50

   Your answer [ ]
10 The price of good X rises from £10 to £12.50. As a result, demand for good Y falls from 1200 to 1080. What is the cross elasticity of demand for good Y with respect to good X, and what is the relationship between the two goods?

A Cross elasticity of demand is –0.4, and the goods are complements
B Cross elasticity of demand is –0.8, and the goods are complements
C Cross elasticity of demand is –0.4, and the goods are substitutes
D Cross elasticity of demand is –0.8, and the goods are substitutes

Your answer

11 Which of the following combination contains two correct statements about a merit good?

<table>
<thead>
<tr>
<th>Statement 1</th>
<th>Statement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Consumers do understand the benefits of consuming them</td>
<td>There is information failure in the market</td>
</tr>
<tr>
<td>B There is information failure in the market</td>
<td>They may create positive externalities</td>
</tr>
<tr>
<td>C They may create negative externalities</td>
<td>They must be provided by the government</td>
</tr>
<tr>
<td>D They must be provided by the government</td>
<td>They may create positive externalities</td>
</tr>
</tbody>
</table>

Your answer
12  The table below shows the output and total costs for a firm. The firm has fixed costs of £100 000 per week.

<table>
<thead>
<tr>
<th>Output per week (000's)</th>
<th>Total costs (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>24000</td>
<td>388 000</td>
</tr>
<tr>
<td>26000</td>
<td>438 000</td>
</tr>
<tr>
<td>28000</td>
<td>492 000</td>
</tr>
<tr>
<td>30000</td>
<td>550 000</td>
</tr>
<tr>
<td>32000</td>
<td>612 000</td>
</tr>
</tbody>
</table>

From the above data it can be concluded that

A  average cost is £16 when output is 32 000.
B  average variable cost is £17.57 when output is 28 000.
C  marginal cost is £40 000 when output is 26 000.
D  total variable cost is £450 000 when output is 30 000.

Your answer

13  When is price elasticity of supply most likely to be greater than one?

A  The product is an agricultural product
B  The product is a necessity
C  There are a large number of firms in the market
D  There is no spare capacity in the industry

Your answer
14 The below table illustrates the potential output of two countries, A and B, if they divide all their resources equally between the production of two goods, X and Y.

<table>
<thead>
<tr>
<th>Country</th>
<th>Good X</th>
<th>Good Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>300</td>
<td>600</td>
</tr>
<tr>
<td>B</td>
<td>600</td>
<td>900</td>
</tr>
</tbody>
</table>

The opportunity cost of producing an additional unit of good X in country A is

A 0.5 units of good Y.
B 1.5 units of good Y.
C 2 units of good Y.
D 3 units of good Y.

Your answer

15 The purpose of a National Minimum Wage is to ensure

A all workers are guaranteed a job.
B employees receive a wage above the market equilibrium wage.
C firms' labour costs are reduced.
D the labour market is in equilibrium.

Your answer
Answer **all** the questions in this section.

**Trends in UK Road Passenger Transport**

The demand for the vast majority of road transport is a derived demand. Since 1950, road traffic in the UK has increased almost tenfold up to 303.7 billion vehicle miles in 2013. The increase has mainly been accounted for by an increase in the number of cars and vans. This has brought with it a number of problems including increased congestion, air and noise pollution. However, more recently, the growth in road use has slowed and since 2008 there has been a slight decrease. Population has increased from 50 million in 1950 to 64 million in 2013 and GDP has increased from £0.29 trillion in 1949 to £1.50 trillion in 2012. However, since 2009 the price of unleaded petrol has increased from 86.3 pence per litre to 130.8 pence per litre in December 2013.

![Fig. 1 Road Traffic in Britain since 1949](image)

There was a slight decline in bus usage (outside London) from 1985–2008. In 2012 estimates for the income elasticity of demand for buses suggest an income elasticity of demand between −0.5 and −1.0. Price elasticity of demand for buses is −0.36 in the short run and −0.7 in the long run. Cross elasticity for buses is estimated to be even lower, with the cross elasticity of demand between bus fares and car travel just −0.1.

Bus fares have increased in real terms since 1986 but bus travel for older and disabled people has been free in England since April 2008. The Transport Act 2000 required all local authorities to provide low price travel for older and disabled people. From April 2008 this was extended to free travel by bus anywhere in England.
In the year ending 2014, the average level of subsidy for buses per passenger journey was 6.3 pence. This decreased (adjusted for inflation) from 10.5 pence in 2005. The subsidy in London is 1.8 pence per passenger journey.

- In 2011, road transport was the largest contributor to total transport greenhouse gas emissions (67% of the total).
- Cars and taxis contributed the most of any transport mode (40% of total).

*Non road transport consists mainly of domestic aviation and shipping and rail.

**Fig. 2 UK Transport: Greenhouse gases (GHG) emissions by mode of transport 2011**

There has also been growing concern about the contribution of road transport to rising emissions, air pollution and global warming.

The London Lorry Control Scheme (LLCS) has been in existence since 1986. It was set up to protect Londoners against the disturbance caused by heavy lorries at night and at weekends. Its objective is to reduce noise nuisance at antisocial times by eliminating through traffic and minimising the environmental effects of heavy lorries. Lorries are banned (or prohibited) from using urban roads during the most environmentally sensitive times, from 9pm–7am Monday–Saturday, and from 1pm Saturday to 7am Monday.
16 (a) What economic term is used to describe pollution and congestion?

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(b) (i) Explain what is meant by the term ‘derived demand’.

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(ii) Using information from the case study identify two factors that may have led to the increase in car travel over the period shown in Fig. 1.

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(c) Explain what is meant by the term ‘income elasticity of demand’.

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(d) Using information from the case study, calculate the effect of a 10% fall in bus fares on

(i) bus travel in the long run.

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(ii) the demand for car travel.

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(e) Explain using an appropriate diagram(s), the likely effect of an increase in population on the market for bus travel.
(f)* Evaluate, using an appropriate diagram(s), whether regulation banning heavy lorries from town centres is a good way to reduce negative externalities. [10]
17* Since gaining its independence in 1991, Estonia has moved from a centrally planned to a free market economy with an increasing reliance on the price mechanism to allocate resources.

Evaluate, using an appropriate diagram(s), the impact on an economy of moving from a centrally planned to a free market system. [20]

OR

18* The consumption of sugary drinks can lead to obesity.

Evaluate, using an appropriate diagram(s), the effectiveness of an indirect tax on sugary drinks as a method of reducing the market failure arising from their consumption. [20]
If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).