You must have:
• a calculator

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 16 pages.
2

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 an example of capital as a factor of production?
   A airspace above an airport used by airlines
   B cars used by a taxi firm in a city
   C money used to set up a steel producing firm
   D shares sold by an expanding insurance firm

Your answer [1]

2 Which statement about total revenue is correct?
   A It is always equal to total cost.
   B It is always equivalent to profit.
   C It is maximised when price elasticity of demand is inelastic.
   D It is price multiplied by quantity sold.

Your answer [1]

3 Which of the following is an example of government failure?
   A an increase in obesity caused by overconsumption of sugar
   B a subsidy on sun cream which reduces the incidence of skin cancer
   C government health warnings on cigarette packets which deter people from smoking
   D government imposed rent controls which reduce the amount of rented accommodation available to the poor

Your answer [1]

4 What is the basic economic problem facing all societies?
   A a divergence between social costs and private costs
   B an unequal distribution of income
   C unemployment of resources
   D unlimited wants and scarce resources

Your answer [1]
5 In which situation is a market allocatively efficient?

A It is when consumer surplus equals producer surplus.
B It is when marginal social benefit equals marginal social cost.
C It is when there are both positive consumption externalities and positive production externalities.
D It is when the value of external benefits exceeds the value of external costs.

Your answer [1]

6 Which type of demand best explains the relationship between the demand for new houses and the demand for bricklayers?

A competitive demand
B composite demand
C derived demand
D joint demand

Your answer [1]

7 Product X has a price elasticity of demand (PED) of – 3.0. Product Y has a PED of – 0.2. Which combination of characteristics is correct?

<table>
<thead>
<tr>
<th>Product X</th>
<th>Product Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>A luxury</td>
<td>non-habit forming</td>
</tr>
<tr>
<td>B many substitutes</td>
<td>necessity</td>
</tr>
<tr>
<td>C necessity</td>
<td>no substitutes</td>
</tr>
<tr>
<td>D non-habit forming</td>
<td>luxury</td>
</tr>
</tbody>
</table>

Your answer [1]

8 A product has a cross elasticity of demand of – 0.2 in relation to another product. What does this indicate?

A It is a close complement to another product.
B It is a distant complement to another product.
C It is a close substitute for another product.
D It is a distant substitute for another product.

Your answer [1]
9 What is not a function of the price mechanism in a market economy?

A to act as an incentive for supply to respond to changes in demand
B to ensure there is an even distribution of income
C to indicate changes in consumer tastes and preferences
D to ration scarce resources

Your answer [1]

10 The production possibility curve for an economy producing capital and consumer goods is shown below.

Which production points are currently attainable?

A W only
B X and Y only
C W, X and Y only
D W, X, Y and Z

Your answer [1]
11 A competitive market experiences an equal decrease in demand and in supply. What effect will these changes have on equilibrium price and equilibrium quantity?

<table>
<thead>
<tr>
<th>Equilibrium price</th>
<th>Equilibrium quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A decrease</td>
<td>decrease</td>
</tr>
<tr>
<td>B decrease</td>
<td>leave unchanged</td>
</tr>
<tr>
<td>C leave unchanged</td>
<td>decrease</td>
</tr>
<tr>
<td>D leave unchanged</td>
<td>leave unchanged</td>
</tr>
</tbody>
</table>

Your answer [1]

12 A firm has total variable costs of £36000. Its average fixed cost is £6 and its average total cost is £9. What is the firm's total output?

A 2400
B 4000
C 6000
D 12000

Your answer [1]

13 Which of the following combination of statements about a public good is correct?

<table>
<thead>
<tr>
<th>Statement 1</th>
<th>Statement 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Consumption by one person does not reduce the</td>
<td>They exist only in a planned economy.</td>
</tr>
<tr>
<td>amount available for others.</td>
<td></td>
</tr>
<tr>
<td>B Non-payers can act as free-riders.</td>
<td>There is no opportunity cost involved in their</td>
</tr>
<tr>
<td></td>
<td>production.</td>
</tr>
<tr>
<td>C Non-payers can act as free-riders.</td>
<td>Consumption by one person does not reduce the</td>
</tr>
<tr>
<td></td>
<td>amount available for others.</td>
</tr>
<tr>
<td>D There is no opportunity cost involved in their</td>
<td>They exist only in a planned economy.</td>
</tr>
<tr>
<td>production.</td>
<td></td>
</tr>
</tbody>
</table>

Your answer [1]
14. The table below shows the market for a product before the imposition of an indirect tax.

<table>
<thead>
<tr>
<th>Price (£)</th>
<th>Quantity demanded per week</th>
<th>Quantity supplied per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>60</td>
<td>3700</td>
</tr>
<tr>
<td>19</td>
<td>180</td>
<td>3000</td>
</tr>
<tr>
<td>18</td>
<td>450</td>
<td>2500</td>
</tr>
<tr>
<td>17</td>
<td>780</td>
<td>1850</td>
</tr>
<tr>
<td>16</td>
<td>1200</td>
<td>1200</td>
</tr>
<tr>
<td>15</td>
<td>1800</td>
<td>990</td>
</tr>
<tr>
<td>14</td>
<td>2700</td>
<td>850</td>
</tr>
<tr>
<td>13</td>
<td>4000</td>
<td>780</td>
</tr>
<tr>
<td>12</td>
<td>6000</td>
<td>450</td>
</tr>
</tbody>
</table>

What would be the change in the equilibrium price if a tax of £4 was imposed?

A £1  B £2  C £3  D £4

Your answer [ ]

15. A firm employs 60 workers, paying each worker £520 a week. To attract an extra worker, the firm raises the wage of each worker to £540 a week. What is the marginal cost of employing the 61st worker?

A £20  B £540  C £1740  D £32940

Your answer [ ]
SECTION B

Answer all the questions in this section.

It costs a lot to drink in Scotland

Alcohol consumption in the UK has more than doubled since 1950, with the rate of increase particularly noticeable since the early 1990s (see Fig. 1). To some extent, this may reflect higher levels of disposable income.

In Scotland, it is estimated that up to 50% of men and 30% of women are drinking more than suggested by recommended guidelines. Over the last 50 years alcohol consumption has increased significantly, and so has alcohol-related harm. As a result, people are now more likely to be involved in an accident or to become a victim of crime. In the longer term, they are more likely to develop cancer, liver disease or other health or social problems, with knock-on consequences for families and communities. Over time the price of alcohol, as a proportion of real income, has fallen. One estimate suggests alcoholic drinks were over 50% more affordable per person in 2007 than in 1980.

Fig. 2 illustrates how excessive consumption of alcohol can cause harm, not only to the individual, but also to others. Lost productivity affects employers and additional criminal activity imposes a heavy burden on policing and the courts.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Cost (£million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>productivity / economic</td>
<td>820</td>
</tr>
<tr>
<td>NHS Scotland</td>
<td>405</td>
</tr>
<tr>
<td>social work</td>
<td>170</td>
</tr>
<tr>
<td>criminal justice and emergency services</td>
<td>385</td>
</tr>
<tr>
<td>other costs</td>
<td>470</td>
</tr>
<tr>
<td><strong>Total cost</strong></td>
<td><strong>2250</strong></td>
</tr>
</tbody>
</table>

Fig. 2 External costs resulting from excessive alcohol consumption, Scotland, 2007
One policy to reduce the problems caused by the excessive consumption of alcohol is to introduce a minimum price for alcohol. This may bring benefits such as a reduction in alcohol-related deaths, hospital admissions, criminal offences and sick days. The Scottish government wants to set a minimum rate of 50 pence per unit of alcohol. This would mean the lowest price a shop or supermarket would be allowed to charge for four large cans of beer would be £4.40, for a bottle of wine it would be £5 and for a standard bottle of vodka, £13.

In 2012, evidence from Canada suggested that consumers may be responsive to increased alcohol prices, and that the implementation of a 10% increase in minimum price results in a 16% decrease in consumption of alcohol.
16  (a) State what is meant by the term ‘opportunity cost’.
........................................................................................................................................................[1]

(b)  (i) Explain what is meant by the term ‘price elasticity of demand’.
........................................................................................................................................................[2]

(ii) Using information from the case study, calculate the price elasticity of demand for alcohol in Canada.
........................................................................................................................................................[2]

(c)  (i) Explain what is meant by the term ‘negative externality’.
........................................................................................................................................................[2]

(ii) Using information from the case study, explain how excessive consumption of alcohol leads to negative externalities.
........................................................................................................................................................[4]
(d) Using information from the case study, explain one reason which could account for the trend in alcohol consumption in Scotland from 1995 to 2007.
Comment, using an appropriate diagram(s), on the effects of imposing a minimum price for alcohol.
Answer Question 17 or Question 18.

17* Wind farms generate renewable energy in the form of electricity. In 2015, government subsidies to wind farms were estimated to cost £1.1 billion.

Evaluate, using an appropriate diagram(s), the effectiveness of subsidies for wind farms as a method of correcting the market failure that results from the production of electricity. [20]

OR

18* JJ Ltd, a small engineering company, is considering increasing its scale of production by expanding its current factory in Hereford. The alternative is to relocate the business to Coventry, which has better transport links and a pool of skilled labour. However, JJ Ltd would not be able to increase the scale of production in Coventry.

Evaluate, using an appropriate diagram(s), the relative costs and benefits of the two options facing JJ Ltd. [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).