You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

INSTRUCTIONS

• Answer all questions.
• Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.

INFORMATION

• The total mark for this paper is 60.
• The number of marks for each question or part question is shown in brackets [ ].
1 **Snappy Box (SB)**

SB is owned by Ralph who is a sole trader. The business prints photographs. Ralph has one shop on the main street of city D. Customers bring their saved digital photographs into the shop and these are printed on high-quality paper.

SB uses a large printing machine that can print on almost any size of paper to produce different sized photograph prints. The process is very capital-intensive and most customers request a batch of photographs to be printed.

SB is the only shop in city D that prints photographs. However, recently a number of online competitors have started to offer low-priced photograph prints to customers. Ralph has noticed that his sales have decreased significantly because of this competition. Ralph estimates the demand for his photograph prints has a price elasticity of demand of $-4$.

SB already has a low profit margin and Ralph is struggling to compete with the online retailers. However, Ralph has an idea to introduce job production into his shop. He could stop printing photographs and instead focus on framing individual photographs for customers. These frames will be made for any sized photograph or picture and can be made from a variety of materials chosen by the customer.

Ralph will need specialised equipment to allow him to make the frames. The equipment would cost $10,000. He has identified two possible sources of finance for this equipment.

The first possible source of finance is for Ralph to lease the equipment from the company that produces it. The lease would be for five years at a fixed cost of $400 per month.

The second possible source of finance is for Ralph to sell the photograph printing machine for at least $10,000, to purchase the equipment to make frames.

(a) (i) Define the term ‘fixed cost’ (line 19). [2]

(ii) Explain the term ‘profit margin’ (line 11). [3]

(b) (i) Use Ralph’s estimate of the price elasticity of demand (line 10) to calculate the percentage change in demand for printed photographs if the price is reduced by 10%. [3]

(ii) Explain one way in which Ralph could use price elasticity of demand when making pricing decisions. [3]

(c) Analyse one advantage and one disadvantage to Ralph of introducing job production. [8]

(d) Recommend whether Ralph should use leasing or should sell his photograph printing machine as a source of finance for the equipment to make frames. Justify your recommendation. [11]
2 Auto Bike (AB)

AB is a private limited company that repairs and maintains motorbikes. AB has nine garages in country J and employs eight highly qualified mechanics in each garage.

Two of the most popular motorbike services that AB sells are the standard service and the advanced service. Table 2.1 contains price and cost information for these services.

<table>
<thead>
<tr>
<th>Service</th>
<th>Price per service</th>
<th>Direct costs per service</th>
<th>Allocated indirect costs per service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>$250</td>
<td>$50</td>
<td>$60</td>
</tr>
<tr>
<td>Advanced</td>
<td>$400</td>
<td>$60</td>
<td>$100</td>
</tr>
</tbody>
</table>

In April, AB sold 1000 standard services and 200 advanced services. The profit margin for an advanced service is higher than the standard service. The directors have decided to promote the advanced service to try and increase sales. Each garage has been given a budget to use for below the line promotion methods with an objective of increasing sales of advanced services in the next six months.

The level of motivation of the mechanics is low. Many mechanics believe that they are not paid well and the conditions of work are dirty and noisy. AB uses a time-based payment method which rewards each mechanic at the same hourly rate. In a recent survey, many mechanics complained that the payment method was unfair. They believe it rewards ‘lazy workers’ as much as those who work hard. It also does not take into account the difficulties involved in some jobs and the simplicity of others. The Human Resources Director has been asked to investigate a new payment method.

(a) (i) Define the term ‘objective’ (line 13).

(ii) Explain the term ‘private limited company’ (line 1).

(b) (i) Calculate the profit made from selling standard and advanced services in April.

(ii) Explain one possible problem for AB of trying to allocate indirect costs.

(c) Analyse two below the line promotion methods that AB could use to increase the sales of advanced services.

(d) Recommend a new payment method for the mechanics at AB. Justify your recommendation.