Part (a)
Managers need cost information to support a range of managerial roles including short-term and strategic decision making, planning and controlling costs, and sometimes for claiming costs under cost reimbursement contracts, and while the production environment in small businesses may be less complex than in larger businesses, these needs may be just as relevant. Managers in small businesses may also need to value their inventory for inclusion in their financial reports. However, small businesses may be discouraged from implementing a product costing system due to scarce resources. This attempt to contain costs can mean that, when making operating decisions, they may rely on costing figures prepared for external reporting purposes. Competitive pricing can result in them under-pricing products to the point that they sell at a loss. To evaluate profitability of products the small business must add cost items such as transportation, insurance and customs charges to its purchase or manufacturing costs. When selling price is dictated by the market it is vital to accurately assess costs and, if profitability is lacking, work on reducing costs or move to different products or markets.

5.15 The essential element in any answer to this question is that the students demonstrate an understanding of job costing, process costing and hybrid systems. In fact job costing would be easier now that (a) much of production has been contracted out and (b) there are fewer variations in customer specifications because most customers are large retail outlets. If there is less variation in specifications there may be some in-house processes that have sufficient throughput to warrant the use of process costing for that part of production. Hence it may be possible to operate a hybrid approach.

Part (b)
Examples of public services that may be suited to the following costing approaches:

(a) Job costing is most likely to be appropriate for road building, bridge repairs, building an infant welfare centre and the development of plans for a new skate park.

(b) Process costing would be appropriate for processing library loans, collecting cash from parking machines, monitoring parking meters and issuing fines.

(c) Hybrid costing methods may be needed for servicing traffic lights, repairing roads and lopping roadside trees. Each job is performed regularly and will be similar but will often differ in terms of time, distance travelled, materials used or equipment required (but not all of these).
Part (c)
5-38 (15–20 min.) Service industry, job costing, law firm

1. 

2. Budgeted professional labour-hour direct cost rate = \frac{\text{Budgeted direct labour compensation per professional}}{\text{Budgeted direct labour-hours per professional}}
   = \frac{170,000}{1,650}
   = A$103.03 per professional labour-hour

Note that the budgeted professional labour-hour direct-cost rate can also be calculated by dividing total budgeted professional labour costs of A$4,250,000 (A$170,000 per professional \times 25 professionals) by total budgeted professional labour-hours of 41,250 (1,650 hours per professional \times 25 professionals), A$4,250,000 \div 41,250 = A$103.03 per professional labour-hour.

3. 

Budgeted indirect cost rate = \frac{\text{Budgeted total costs in indirect cost pool}}{\text{Budgeted total professional labour-hours}}
   = \frac{A$2,350,000}{1,650 \times 25}
   = 2,350,000 \div 41,250
   = A$56.9697 per professional labour-hour
4. **Blighton**

<table>
<thead>
<tr>
<th>Direct costs:</th>
<th>Judy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional labour, $103.0303 \times 120; $12363.64</td>
<td>090.91</td>
</tr>
<tr>
<td>$103.0303 \times 195</td>
<td></td>
</tr>
<tr>
<td>Indirect costs:</td>
<td></td>
</tr>
<tr>
<td>Legal support, $56.9697 \times 120; $6836.36</td>
<td>11109.09</td>
</tr>
<tr>
<td>$56.9697 \times 195</td>
<td></td>
</tr>
</tbody>
</table>

**5-39 (25–30 min.) Service industry, job costing, two direct and two indirect cost categories, law firm (continuation of 5-38)**

Although not required, the following overview diagram is helpful to understand Rudd & Associates job-costing system.
1. Professional Partner Labour
   Budgeted compensation per professional
   Divided by budgeted hours of billable time per professional
   Budgeted direct-cost rate
   
   a Can also be calculated as
   Total budgeted partner labor costs = A$345 000 \times 5 
   Total budgeted partner labor - hours = 1650 \times 5
   = A$1 725 000
   \frac{A$1 725 000}{8250} = A$209.09
   
   b Can also be calculated as
   Total budgeted associate labor costs = A$127 000 \times 20 
   Total budgeted associate labor - hours = 1650 \times 20
   = A$2 540 000
   \frac{A$2 540 000}{33 000} = A$76.9697

2. General Support
   Secretarial Support
   Budgeted total costs
   Divided by budgeted quantity of allocation base
   Budgeted indirect cost rate
   
   a Can also be calculated as
   Total budgeted partner labor costs = A$345 000 \times 5 
   Total budgeted partner labor - hours = 1650 \times 5
   = A$1 725 000
   \frac{A$1 725 000}{8250} = A$209.09
   
   b Can also be calculated as
   Total budgeted associate labor costs = A$127 000 \times 20 
   Total budgeted associate labor - hours = 1650 \times 20
   = A$2 540 000
   \frac{A$2 540 000}{33 000} = A$76.9697
3. **Blighton**            **Judy**

Direct costs:
- Professional partners,
  A$209.09 × 60; A$209.09 × 30
  A$12,545.40       A$6,272.70
- Professional associates,
  A$76.9697 × 40; A$76.9697 × 120
  3,078.79          9,236.36

**Direct costs**
- A$15,624.19       A$15,509.06

Indirect costs:
- General support, A$46.0606 × 100; A$46.0606 × 150
  4,606.06          6,909.09
- Secretarial support,
  A$72.7272 × 60; A$72.7272 × 30
  8,969.69          9,090.91

**Indirect costs**
- A$24              A$24,599.97

**Total costs**
- A$24,593.88      A$24,599.97

4. **Blighton**            **Judy**

Single direct - Single indirect
(from Problem 5-38)
- A$19,200.00       A$31,200.00

Multiple direct – Multiple indirect
(from requirement 3 of Problem 5-39)
- A$5,393.88        A$6,600.03

**Difference**
- Undercosted
- Overcosted

The Blighton and Judy jobs differ in their use of resources. The Blighton job has a mix of 60% partners and 40% associates, while Judy has a mix of 20% partners and 80% associates. Thus, the Blighton job is a relatively high user of the more costly partner related resources (both direct partner costs and indirect partner secretarial support). The refined costing system in Problem 5-39 increases the reported cost the Blighton job by 28.09% (from A$19,200 to A$24,593.88). On the other hand, the Judy job was overcosted by the single overhead cost pool (A$31,200 versus A$24,599, a reduction of 21.15%) for the same reasons. Note the implication of this for competitiveness – the firm is likely to attract more customers like Blighton (presumably more complex, requiring the partner’s time) and lose customers like Judy that are more simple.