Section A

Question	Correct Answer	Marks
1	**B and D** **External and secondary** The surveys provide information from outside the organisation, hence would be considered to be external. The surveys have been carried out by someone other than the restaurant manager and so would be classified as secondary. A primary source is where the data is collected by the organisation itself.	2
2	**C** **Semi-variable cost** Semi-variable costs, also known as mixed costs, contain a fixed and a variable cost element. Here the basic salary is the fixed element, and the commission is a variable element, so the sales representative's earnings are a semi-variable cost.	2
3	**C** **Toy cars are work in progress and the plastic is raw material** The toy cars are work in progress rather than finished goods as they require packaging before they are ready for sale or dispatch. The plastic is a raw material as it has been purchased in order to be incorporated into goods for sale. It is not in a sufficient intermediate stage to be classified as work in progress as it could be incorporated into any one of a number of products.	2
4	**A** **$16.30** Total production cost using absorption costing = prime cost (total direct costs) + production overheads. Production overheads are absorbed on the basis of machine hours. Each unit requires 0.5 machine hours. Total production cost = $9.60 + ($13.40 x 0.5) = $16.30	2

5	**C** **Glue to attach the fabric to the seat of a chair** The amounts of fabric, metal and wood used to manufacture a chair will be able to be identified for each chair and therefore will be treated as direct costs. The amount of glue used to attach the fabric to the seat will not be able to be separately identified for each chair but will be able to be identified for a batch of chairs. This will be treated as an indirect cost.	2
6	**C** **Both 1 and 2** If a sales invoice totalling $100 is received, which includes sales tax of $15 and a trade discount of $5, the amount to be recorded as sales revenue is $80 ($100 - $15 - $5). This is the value net of trade discount and sales. Sales can be analysed in different ways for management accounting purposes, for example by region, by product or by sales team member.	2
7	**$243** The minimum payment will be given when the number of units produced is less than or equal to 75 ($45/$0.60), so on Tuesday, Wednesday and Thursday. The total earnings for the week will be (90 x 0.6) + 45 + 45 + 45 + (90 x 0.6) = $243. Note: the figure which should be inserted into the answer area is 243	2
8	**$66,000** The contribution per unit of the product is equal to sales price less variable production costs, $6. Total contribution = $6 x 18,000 units sold = $108,000. Profit under marginal costing equals total contribution less total fixed costs, which equals $108,000 - $42,000 = $66,000. Note: the figure which should be inserted into the answer area is 66	2

9	**Percentage sales volume of each car model for the last 12 months – Pie chart** **The general trend of electric car sales over the last 12 months – Line graph** Pie charts are used to show the relative sizes of a total amount, such as the percentage sales value of each type of car. A line graph would not show this clearly. A line graph, however, would be suitable for showing a general trend over time.	2
10	**C** **Payroll system** The description is of the payroll system which records all the necessary information to ensure that the payroll calculations and transactions are carried out correctly.	2
11	**A** **The grouping of costs according to their common characteristics** The grouping of costs according to their common characteristics is the definition of cost classification. Costs can be classified in many ways, for example material or labour, direct or indirect, fixed or variable or production or non-production.	2
12	**B** **Overhead allocation** Overheads which relate clearly to one cost centre are allocated to that cost centre. Overheads which must be shared amongst cost centres are apportioned. Overhead absorption relates to the absorption of overhead costs to the final product.	2
13	**D** **Overtime premium at the specific request of a customer** Overtime worked at the specific request of a customer is charged to that customer and treated as a direct cost. Overtime worked due to a backlog in production is treated as an indirect cost. Idle time is always treated as an indirect cost whether or not it is controllable.	2

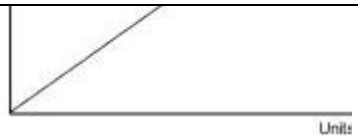
14	**C** **Stacked (compound) bar chart** A stacked bar chart would be the most suitable to present the data as there are several component costs for each factory. Each would be able to be shown and the totals for each factory would be clear to compare. The other types of charts would not be able to clearly show this.	2
15	**C** **Factory supervisor's wages** Production costs are those that are connected with the manufacture of the item that is sold by the company. Of the option given factory supervisor wages are production related. The wages would be considered to be indirect costs as they cannot be directly attributed to the specific cost unit; the supervisor will oversee a number of staff who are involved in producing many units. The other costs given are not examples of production costs.	2
16	**B** **The accountancy department in a business** A cost centre is any production or service area or function of an organisation to which costs can be related. A hotel is likely to be a profit or investment centre.	2
17	**$703,290** Contribution = sales – variable costs. Unit contribution = ($70 – $29.50 – $4.80) = $35.70. Total contribution = $35.70 x 19,700 = $703,290 Note: the figure which should be inserted into the answer area is 703290	2
18	**B** **$311.68** Pay before deductions = (35 x $11) + (3 x $11 x 1.4) = $431.20 Relevant deductions are income tax ($76.40) and employee benefit contributions (10% x $431.20). Net pay = $431.20 – $76.40 – $43.12 = $311.68	2

19	**D** **1, 2 and 3** In selecting a communication method (letter, email, telephone call etc) it is important to consider the cost of the method, the degree of confidentiality required, and the speed of delivery required.	2
20	**Salary costs of machine maintenance staff – Indirect labour** **Lighting costs of component inventory storeroom – Indirect expenses** Machine maintenance staff salaries cannot be identified with a specific unit of output (and hence are not direct costs) and so are a form of indirect labour cost. Lighting costs for the storeroom are considered to be indirect as the storeroom provides a service for all products that are manufactured. The costs are an expense as they are not specifically incurred on material inputs themselves.	2
21	**$2,600** The production costs are as follows: - Servicing of factory machinery - Repair of flooring - Paint spraying equipment rental Paint spraying equipment is a direct cost as it is attributable to a single customer order. The other production costs are indirect and total: $1,800 + $800 = $2,600. Note: the figure which should be inserted into the answer area is 2600	2
22	**C** **$63,000** Total indirect costs = $80,000 + $25,000 = $105,000. Cost centre B will be apportioned 12,000/(12,000 + 8,000) x $105,000 = $63,000.	2

23	**A and D** **Hire of machines each with capacity to produce 50,000 tyres per year and salaries of quality control officers who have an annual testing capacity of 200,000 tyres are both stepped fixed costs.** Hire of machines and salaries of quality control officers are stepped fixed costs as they will remain constant over a range of production and then increase at a stated quantity (after 50,000 units an additional machine will be hired, and after 200,000 units additional officer(s) will be employed). The number of leaflets printed will not vary with the production levels and so is considered to be a fixed cost with regard to output. Tyre rubber purchase cost would vary with production and so is a variable cost.	2
24	**B** **$355** When FIFO is used, the first items received into stock are the first to be issued to production. The issue on 3 Mar would have left 60 units of opening balance remaining. The issue on 9 Sept would therefore be made up of 60 units of opening balance and 10 units from 4 Jun = (60 x $5.00) + (10 x $5.5) = $355.00.	2
25	**Market research – External** **Inventory system – Internal** **Employee satisfaction survey – Internal** **Trade journals and websites – External** Internal information sources refer to those generated from within the organisation, which will include the inventory system and employee satisfaction surveys. External information sources are those which come from outside the organisation, including market research and trade journals.	2

26	**C** **Cutting should be based on machine hours and Finishing should be based on labour hours** The basis for overhead absorption is generally based on the most important element for each department. In this case, machine hours are the most significant element for the Cutting cost centre and labour hours are the most significant element for the Finishing cost centre.	2
27	**$5.00** Total cost of manufacturing is $5,000 and fixed costs are $1,500, so total variable cost = $5,000 - $1,500 = $3,500. Variable cost per unit = $3,500/700 = $5.00. This is the point A shown on the variable cost per unit graph. Note: the figure which should be inserted into the answer area is 5.00	2
28	**D** **To calculate pay and to charge cost centres for work done** Timesheets record hours worked on certain tasks. They can therefore be used to calculate pay and charge work done to cost centres. A payslip would show tax deductions.	2
29	**B** **$156** The guaranteed wage of $50 will be used on days when the number of units worked is less than 100, therefore on day 2. The total wages for the three days will be (100 x $0.50) + $50 + (100 x $0.50) + (10 x $0.60)) = $156	2

30	**B** **$24,000** Year 1 / Year 2 Indirect costs: $35,000 + $45,000 = $80,000 / $80,000 x 1.2 = $96,000 Square metres: A: 10,000, B: 5,000, C: 0, Total: 10,000 + 5,000 = 15,000 / A: 10,000, B: 5,000, C: 5,000 (bal. fig.), 15,000 x 1.33 = 20,000 In year 2 the cost apportioned to department B = 5,000/20,000 x $96,000 = $24,000	2
31	**A** **1 only** In an efficient coding system, codes should be unique. Codes should also be uniform in length and structure. Codes do not have to disguise the item being coded and do not have to include both letters and numbers.	2
32	**Adhesive used in sealing packaging for final products – Variable** **Total factory power costs comprising fixed fee plus usage charge – Semi-variable** **Salaries of office cleaning staff – Fixed** **Total wage costs for production staff paid on a piecework basis – Variable** Adhesive is a variable cost as the total amount used will increase proportionately with output. Factory power is a semi-variable cost with a fixed element (the fixed fee) and an element that varies with production output (the usage charge). Salary costs are considered fixed as they are paid at the same rate irrespective of output. Piecework wage costs are variable as they will increase in line with output.	2

33	**D** **Dr Production overhead Cr Materials control** Indirect costs are always debited to the production overhead account. Direct costs are debited to the work-in-progress account.	2
34	 Ingredients are a variable cost and so will be shown as an upward sloping line that passes through zero. An upward sloping line that starts at a point on the vertical axis is a semi-variable cost. A stepped cost is a series of horizontal lines at increasing costs. A fixed cost remains constant in total at all levels of output and is shown by a horizontal line.	2
35	**Absorption costing: $95,200** **Marginal costing: $64,800** Closing inventory is equal to 7,000 + 25,000 – 28,000 = 4,000 units. Under absorption costing this is valued at full production cost = $16.20 + $7.60 per unit = $23.80 per unit. Total closing inventory value equals 4,000 x $23.80 = $95,200. Under marginal costing this is valued at variable production cost = $16.20 per unit. Total closing inventory value equals 4,000 x $16.20 = $64,800. Inventory valuation would not include the non-production overheads under either method.	2
36	**D** **$90,300** Total manufacturing costs = total direct costs + production overhead. Production overheads amount to $124,700 and this is 58% of the total. Total direct costs are therefore 42% of the total and amount to ($124,700/0.58 x 0.42) = $90,300.	2

37	**C** **Variable cost** The cost per unit is constant at $2.25 for all levels of production. This is indicative of a variable cost. Fixed cost would be the same in total at all levels of production. Semi-variable cost would increase in total as production increases, but the cost per unit would decrease. Stepped fixed cost would vary as the total fixed cost changes for differing levels of production.	2
38	**$88,500** Closing inventory = opening inventory + production – sales. (0 + 400,000 – 394,000) = 6,000. Under marginal costing, inventory is valued at variable production cost. The value of the closing inventory is therefore 6,000 x $14.75 = $88,500. Note: the figure which should be inserted into the answer area is 88500	2
39	**B** **1 and 3 only** When providing management information, key features include making sure it is communicated to the right person, and that it is sufficiently accurate for its cost. However, information should only be provided where the benefit of providing the information outweighs the cost of providing it.	2
40	**C** **Responsibility for revenues and costs** Revenue centre managers are responsible for revenues but not costs. Cost centre managers are responsible for costs but not revenue. Profit centre managers are responsible for both revenues and costs and investment centre managers are responsible for revenues, costs and investments.	2

41	**B** **$546** Using AVCO, the unit cost of material will be updated after every receipt. After Day 3 receipt the average cost per unit is $1,420/(160+230) = $3.64 per unit. The issues on both Day 5 and Day 8 would therefore be valued at this cost. So, for Day 8 the cost of the issue of 150 units is $3.64 x 150 = $546.	2
42	**C** **$7,660** Production overhead would be charged with indirect costs. All the costs shown are indirect costs, except the overtime hours of direct workers at basic rate. This element is a direct cost. Total indirect cost is therefore ($2,400 + $1,660 + $840 + $2,760) = $7,660.	2
43	**C** **ND24SC** The first two digits represent the cost centre, which is Northern division (ND). The third and fourth digits represent the type of expense, which is a selling expense (24). The fifth and sixth digits represent the detail of the expense, which is commission (SC). The correct code is therefore ND24SC.	2

44	**C** **Department C** Absorption rates can be calculated as follows: Department A $60,000 / 10,000 = $6.00 Department B $90,000 / 15,000 = $6.00 Department C $120,000 / 12,500 = $9.60 Department D $80,000 / 10,000 = $8.00 Therefore, Department C has the highest absorption rate.	2
45	**D** **Information consists of data which has been processed in a predefined way** Data consists of raw facts that have not been processed. Information is data which has been processed and may be shown diagrammatically.	2

Section B

<table>
<tr><th>Question</th><th>Correct Answer</th></tr>
<tr><td>46</td><td>
Task 1 (2 marks)

Assembly - $14,400
Packaging - $10,800

Light and heat costs are apportioned on the basis of floor area as follows:
Assembly = ($61,200/1,700m^2) x 400m^2 = $14,400
Packaging = ($61,200/1,700m^2) x 300m^2 = $10,800

Note: the figures which should be inserted into the answer areas are 14400 and
10800 respectively.

Task 2 (2 marks)

D

$5.02

<table>
<tr><th>Overhead costs</th><th>Cutting $</th><th>Assembly $</th><th>Packaging $</th><th>Total $</th><th>Basis of apportionment</th></tr>
<tr><td>Supervisor salaries</td><td>32,400</td><td>12,960</td><td>9,720</td><td>55,080</td><td>Labour hours</td></tr>
<tr><td>Factory power</td><td>120,000</td><td>15,000</td><td>18,000</td><td>153,000</td><td>Machine hours</td></tr>
<tr><td>Light and heat</td><td>36,000</td><td>14,400</td><td>10,800</td><td>61,200</td><td>Floor area (m^2)</td></tr>
<tr><td>Machinery insurance</td><td>12,500</td><td>5,000</td><td>1,875</td><td>19,375</td><td>Machinery value</td></tr>
<tr><td>Total overheads</td><td>200,900</td><td>47,360</td><td>40,395</td><td>288,655</td><td></td></tr>
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Supervisor salary costs are apportioned on the basis of labour hours as follows:

Cutting = ($55,080/30,600) x 18,000 = $32,400. So total Cutting department overhead costs are $200,900.

Cutting department overhead absorption rate = $200,900/40,000 hours = $5.02 per machine hour.
Task 3 (1 mark)
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	D **Allocate / apportion / absorb** Absorption costing is carried out in the following order: (i) Allocate overhead costs to the departments where possible (ii) Apportion remaining overhead costs across all departments using the appropriate bases (iii) Absorb overheads into the cost units

47	**Task 1 (2 marks)** **Labour cost per unit = $2.03** Standard time of actual production = 12 mins × 330 units = 66 hours. Actual hours = 50 hours, so time saved is 16 hours. Total pay is 50 hours at basic rate of $11.80/hour + 16 hours bonus of $5/hour = (50 x $11.80) + (16 x $5) = $670. Labour cost per unit is $670/330 units = $2.03 per unit Note: the figure which should be inserted into the answer area is 2.03 **Task 2 (2 marks)** **C** **$830.50** Total hours worked = 45 Weekday overtime rate = $16.50 x 4/3 = $22 per hour Weekend overtime rate = $16.50 x 2 = $33 per hour Basic pay = 37 hours x $16.50 = $610.50 Weekday overtime = (41 – 37) = 4 hours x $22 = $88 Weekend overtime = 4 hours x $33 = $132 Total salary = $610.5 + $88 + $132 = $830.50. **Task 3 (1 mark)** **B** **$264** 2 hours of overtime (paid at 2 x $16.50 = $33 per hour) has been worked for each of the four supervisors for the company purposes and so would be classified as an indirect cost and hence charged to the production overheads account. This equates to 4 x 2 x $33 = $264. All other costs, both basic and overtime, have been incurred to meet a customer order and so would be charged as direct costs directly to the work- in-progress account.