

Mark Scheme (Results)

January 2012

Principal Learning

Manufacturing & Product Design
MP201 Paper 01

Running a Manufacturing Business

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General Marking Guidance

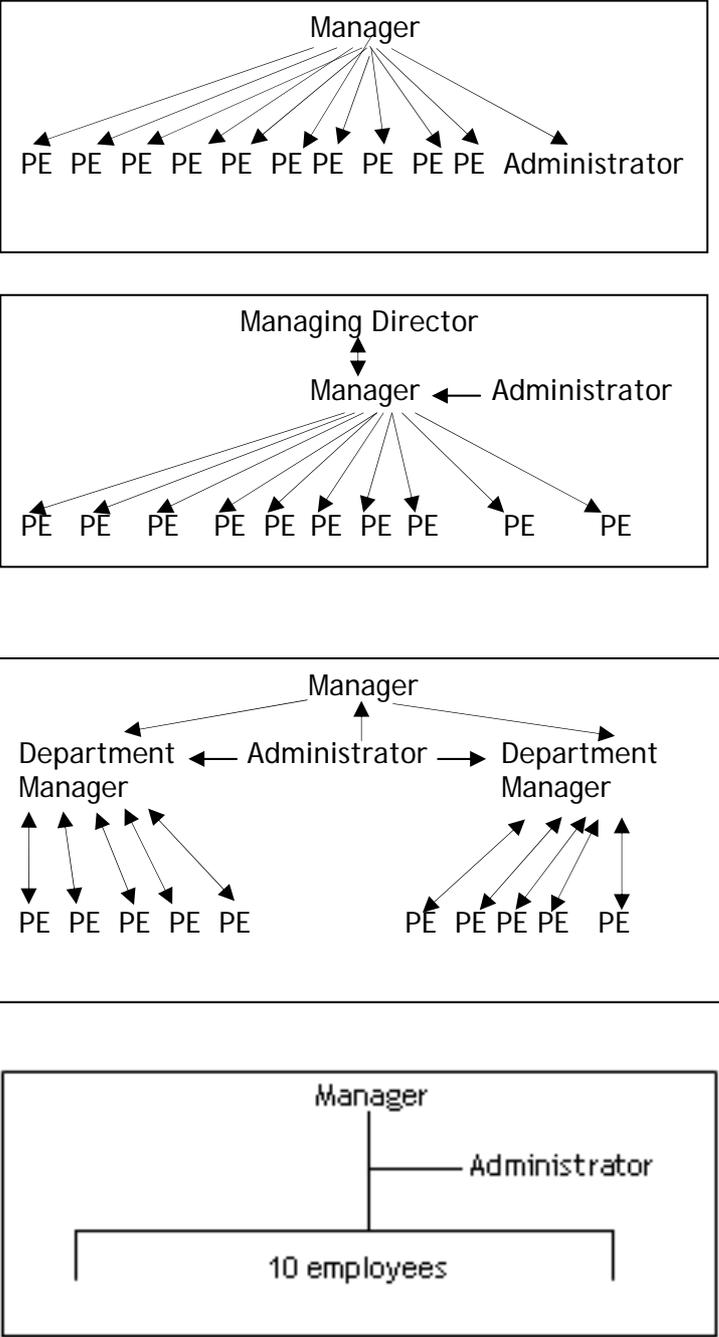
- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Question Number	Answer	Mark
1	Sales	(1)

Question Number	Answer	Mark
2	<ul style="list-style-type: none"> • Large • High volume • Medium-large 	(1)

Question Number	Answer	Mark
3	<p>One mark for each, to a maximum of 3</p> <ul style="list-style-type: none"> • Small number of employees / fewer supervisors and managers • Not more than 50 employees • Sole trader/Partnership • Small turnover/volume of sales • Turnover less than £6.5m • One product manufactured <p>Accept any other suitable answer No repetition</p> <p style="text-align: right;">(3 x 1)</p>	(3)

Question Number	Answer	Mark
4	<p>Low response (1) or 2 low responses (2) Or detailed response (2) To a maximum of 2 marks:</p> <p>Moves products to customer (1) at a specified time/day (1)</p> <p>Analyses maximum/minimum customer requirements (1) to ensure sufficient transport/lorries (1)</p> <p>Managing (1) distribution of goods/supply chain (1)</p> <p>Analyses when/where products required (1) for efficient use of transport (1)</p> <p>Accept any other suitable answer</p> <p style="text-align: right;">(1 x 2) (2 x 1)</p>	(2)

Question Number	Answer	Mark
5	<p>Learners produce a simple drawing:</p>  <p>One or two layers of management (1) Manager(s) as focus (1) Administrator shown reporting to Department/Manager (1)</p> <p style="text-align: right;">(3 x 1) (3)</p>	

Question Number	Answer	Mark
6	<ul style="list-style-type: none"> • Production (1) • Quality (1) • Design (1) • Legal (1) • Administration (1) • Distribution (1) <p style="text-align: right;">(3 x 1)</p>	(3)

Question Number	Answer	Mark
7	<p>1 mark for each of the following to a maximum of 2 marks</p> <ul style="list-style-type: none"> • One person/sole trader (1) • Fewer than 10 employees (1) • Possibly self employed (1) • Low turnover (1) • Not registered for VAT (1) • One business location (1) <p>Accept any other suitable answer</p> <p style="text-align: right;">(2 x 1)</p>	(2)

Question Number	Answer	Mark
8	<p>Low response (1) or 2 low responses (2) Or detailed response (2)</p> <p>Wages/other costs cheaper (1) so profits increase/control of costs (1)</p> <p>Larger pool of labour (1) with appropriate skills (1)</p> <p>Closer to customers (1) no import tariffs (1)</p> <p>Emerging markets (1) opportunities for many new customers (1)</p> <p>Availability of raw materials/supplies (1) so reduced transportation costs (1)</p> <p>Foreign government incentives (1) increased cash flow (1)</p> <p>Local fines/laws (1) associated with company output (1)</p> <p>Political climate (1) may change in the future (1)</p> <p>No repetition</p> <p style="text-align: right;">(1 x 2) (2 x 1)</p>	(4)

Question Number	Answer	Mark
9(a)	<p>Identification of short-term negative effect (1), description (1) to a maximum of 2 marks 2 identifications for the outline – 1 mark only</p> <p>Increased need for supplies (1) may not be able to meet other orders from existing customers (1)</p> <p>Decrease in existing customer satisfaction (1) reduction in size of customer base (1)</p> <p>Large increase in output (1) staff/production facilities insufficient to meet order on time (1)</p> <p>Need for worker overtime (1) impacts short term cash flow/bank loan required (1)</p> <p>Short term stress impact (1) may lead to mistakes (1)</p> <p>Accept any reasonable response</p>	(1 x 2) (2)

Question Number	Answer	Mark
9(b)	<p>Identification of long-term positive effect (1), description (1) to a maximum of 2 marks 2 identifications for the outline – 1 mark only</p> <p>Large payment on large order so increase in cashflow/profits (1) able to reduce long-term debts (1)</p> <p>New customer may repeat order (1) and so increase profits and sustainability / reputation with bigger customers (1)</p> <p>Large repeat orders will mean larger orders of supplies (1) so can negotiate price reduction in supplies (1)</p> <p>Accept any reasonable response</p>	(1 x 2) (2)

Question Number	Answer	Mark
10	<p>1 mark for identification, 1 mark for description Up to 2 marks for each advantage</p> <p>Manager can quickly communicate/control many employees (1) at same time (1)</p> <p>Fewer managers (1) business salary costs lowered (1)</p> <p>Fewer barriers to sharing of ideas between employees (1) as on same hierarchical level (1)</p> <p>Fewer layers (1) so management messages reach employees faster (1)</p> <p>Greater employee autonomy (1) as management supervision limited (1)</p> <p>Delegation to employees (1) improves employee training opportunities/morale (1)</p> <p>All problems coming to the manager are likely to be similar (1) so solution will be well practised and known (1)</p> <p>No repetition</p> <p style="text-align: right;">(2 x 2) (1 x 2) (2 x 1)</p>	(4)

Question Number	Answer	Mark																																										
11(a)	1 mark for each correct answer (shaded cells)																																											
	<table border="1"> <thead> <tr> <th></th> <th>Jan</th> <th>Feb</th> <th>Mar</th> <th>Apr</th> <th>May</th> <th>Jun</th> </tr> </thead> <tbody> <tr> <td>Opening Balance</td> <td>0</td> <td>(2380)</td> <td>(2635)</td> <td>565</td> <td>(1815)</td> <td>(4195)</td> </tr> <tr> <td>Sales</td> <td>0</td> <td>2420</td> <td>7800</td> <td>0</td> <td>0</td> <td>3900</td> </tr> <tr> <td>Costs</td> <td>680</td> <td>975</td> <td>2900</td> <td>680</td> <td>680</td> <td>1450</td> </tr> <tr> <td>Salary</td> <td>1700</td> <td>1700</td> <td>1700</td> <td>1700</td> <td>1 700</td> <td>1700</td> </tr> <tr> <td>Closing Balance</td> <td>(2380)</td> <td>(2635)</td> <td>565</td> <td>(1815)</td> <td>(4195)</td> <td>(3445)</td> </tr> </tbody> </table>		Jan	Feb	Mar	Apr	May	Jun	Opening Balance	0	(2380)	(2635)	565	(1815)	(4195)	Sales	0	2420	7800	0	0	3900	Costs	680	975	2900	680	680	1450	Salary	1700	1700	1700	1700	1 700	1700	Closing Balance	(2380)	(2635)	565	(1815)	(4195)	(3445)	
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Question Number	Answer	Mark
11(b)	<p>Low response (1) or detailed response (2) up to 2 marks per description</p> <ul style="list-style-type: none"> • Take out a bank loan (1) to stay afloat (1) • Find more sales/hire sales person/advertise/marketing (1) to generate more business/sales (1) • Reduce staff levels/take no salary (1) to reduce costs (1) • Diversify product range (1) to address market fluctuations (1) • Reduce operating costs/sell assets (1) to increase profit (1) • To close business (1) cut losses (1) • Investigate other sources of funding (1) to achieve sustainability (1) • Analyse peak sales period (1) repeat sales technique (1) • Buy supplies in bulk/economies of scale (1) reduce costs (1) • Increase selling price (1) increase profits (1) 	
	(2 x 2) (1 x 2) (1 x 2)	(4)

Question Number	Answer	Mark
12	<p>Low response (1) or detailed response (2) up to 2 marks per description 2 low responses for 1 description - 1 mark only</p> <ul style="list-style-type: none"> • Competing products (1), lower sales of both (1) • Customer/investor confusion of company/product image (1), value or premium quality company/product (1) • Two models to keep up-to-date/buy stock (1), greater costs than if one model (1) • Duplication of business functions if separate divisions for each product (1) so duplication of costs (1) • Value model could take greater proportion of after sales support/investment (1) affecting profitability (1) • Current models do not meet entire customer needs/base (1) so reducing sales/profits (1) <p>No repetition</p> <p style="text-align: right;">(1 x 2) (1 x 2)</p>	(4)

Question Number	Answer	Mark																																			
13(a)	<p>1 mark for 21 000 in either/both July/August 1 mark for 800 in September 1 mark for 22 900 in December</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Jul</th> <th>Aug</th> <th>Sept</th> <th>Oct</th> <th>Nov</th> <th>Dec</th> </tr> </thead> <tbody> <tr> <td>Stock beginning of month</td> <td></td> <td>21_000</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sales</td> <td></td> <td></td> <td>800</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Production</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Stock end of month</td> <td>21_000</td> <td></td> <td></td> <td></td> <td></td> <td>22_900</td> </tr> </tbody> </table>	Month	Jul	Aug	Sept	Oct	Nov	Dec	Stock beginning of month		21_000					Sales			800				Production							Stock end of month	21_000					22_900	(3 x 1) (3)
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Question Number	Answer	Mark
13(b)(i)	<p>25 000 x 10 % 25 000 + 2 500 1 mark for calculation of both/either of above greater than 27 500 (1) (Sept, Oct, Nov) 3 months (1)</p>	(3)

Question Number	Answer	Mark
13(b)(ii)	<p>Up to 2 marks for each factor 1 mark for identification, 1 mark for expansion 2 low responses for each factor – 1 mark only</p> <p>Sales strategy during summer months (1) to increase sales (1) Adjust manufacturing levels each month (1) to the optimum for sales (Just in Time) (1) Introduce sales offers (1) to reduce stock levels (1) Redesign product (1) to increase market potential (1) Move in to corporate sales (1) evens seasonal demand (1) No repetition</p>	(1 x 2) (1 x 2) (4)

Question Number	Answer	Mark
14	<p>1 mark for identification, 1 mark for expansion 2 low responses for each factor – 1 mark only</p> <ul style="list-style-type: none"> • Manage/control budgets (1) to keep to financial plan (1) • Easier to keep financial records up-to-date (1) lines of accountability (1) • Monitoring purposes (1) less chance of fraud (1) • Meeting financial standards (1) improved profile for customers/investors (1) <p style="text-align: right;">(2 x 2) (1 x 2) (1 x 2)</p>	(4)

Question Number	Answer	Mark
15	<p>Correct calculation = 1 mark for each step to a maximum of 6 marks</p> <p>Final correct answer = 1 mark</p> <p>Allow for reasonable rounding errors.</p> <p>Selling price excluding VAT $\text{£}3300/120 \times 100 = \text{£}2750$ (1)</p> <p>Calculate value of parts less VAT $\text{£}700 /120 \times 100 = \text{£}583.33$ (1)</p> <p>Calculate the total costs $\text{£}583.33 \times 10\%$ (1) $\text{£}583.33 + \text{£}58.33 = \text{£}641.66$ (1)</p> <p>Calculate gross profit $2750 - 641.66$ (1) $= \text{£}2108.34$ (1)</p> <p style="text-align: right;">(6 x 1)</p>	<p style="text-align: right;">(6)</p>

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