

Mark Scheme

Principal Learning

Manufacturing and Product Design (MP201/01)

Version 2

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	Small or micro	(1)

Question Number	Answer	Mark
2	Large or accept medium	(1)

Question Number	Answer	Mark
3	Hierarchical	(1)

Question Number	Answer	Mark
4	A description such as: <ul style="list-style-type: none"> • One that has very few or only one layer • Chain of command is short • Span of control is wide 	(1)

Question Number	Answer	Mark
5	Any one of the following statements: <ul style="list-style-type: none"> • Easier/faster communications • Team approach • Less bureaucracy • Easier decision making • Lower costs 	(1)

Question Number	Answer	Mark
6	Any two of the following: <ul style="list-style-type: none"> • Administration • Production • Quality • Marketing • Sales • Distribution • Finance • Legal • Research • Design • Management • Human Resources • Planning Award 1 mark per correct answer, to a maximum of 2 marks	(2)

Question Number	Answer	Mark
7	Finance	(1)

Question Number	Answer	Mark
8	<p>Any three of the following:</p> <ul style="list-style-type: none"> • Have competitive pricing • Manufacture quality products • Provide good service • Develop new products • Ensure availability of supplies • Ensure availability of labour • Have efficient distribution • Control costs • Make a profit • Train/develop staff • Ensure cash flow • Collect payments on time • Act quickly to solve problems • Control waste • Control rejects • Control downtime • Any other suitable answer <p>Award 1 mark per correct answer, to a maximum of 3 marks</p>	(3)

Question Number	Answer	Mark
9	<p>Any two of the following:</p> <ul style="list-style-type: none"> • To ensure a company can pay its bills • To avoid excessive borrowings eg overdrafts • To avoid/minimise risk of bankruptcy • To allow investment of cash surpluses • To help plan spending • To help secure longer term finance <p>Award 1 mark per correct answer, to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
10	<p>Any three of the following:</p> <ul style="list-style-type: none"> • To estimate financial performance • To ensure margins are made • To ensure profits are made • To minimise losses • To avoid overspending • To avoid underspending • To predict performance to help plan spending • To check actual performance against budgeted performance • To monitor progress • To identify problems (adverse variances) • To identify what remedial action is required • To monitor performance of individual cost centres; sales, production etc • To assist in estimating cash flow • Any other appropriate answer <p>Award 1 mark per correct answer, to a maximum of 3 marks</p>	(3)

Question Number	Answer	Mark
11	<p>Any two of the following points:</p> <ul style="list-style-type: none"> • To ensure financial targets are met • To ensure profits are made • To avoid financial losses • To ensure expenditure is not wasted on investments • To control/minimise borrowings • To facilitate the reinvestment • To enable resource expansion • To fund research and development • To attract outside investment in the company • To assure bank eg loan/overdraft facilities • Any other appropriate answer <p>Award 1 mark per point made, to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
12(i)	<p>Gross Profit = Sales (£5000) - Cost of Sales (£500) = £4500</p>	(1)

Question Number	Answer	Mark
12(ii)	<p>Rent £150</p>	(1)

Question Number	Answer	Mark
12(iii)	Entered figures as follows Gross profit £4500 Rent £150 Both must be entered in the correct places Allow follow through from (i) and (ii) of incorrect figures	(1)

Question Number	Answer	Mark
12(iv)	Gross Profit = Sales (£4000) - Cost of Sales (£500) = £3500 Net Profit = Gross Profit (£3500) - Expenses (£1000) = £2500	(1)

Question Number	Answer	Mark
13	Entered figures for Friday as follows Yield per mix 160 Cost per mix £10 Award 1 mark per correct answer	(2)

Question Number	Answer	Mark
14	Error occurred in February (1) Correct figure £16,800 (1)	(2)

Question Number	Answer	Mark
15	<p>An answer making reference to any one of the following points:</p> <ul style="list-style-type: none"> • Confusion • Reporting structures • Lack of task completion • Unsure about roles/responsibilities • Not knowing who is the boss • Difficult monitoring teams • Higher costs <p style="text-align: right;">(1 x 1)</p> <p>For example:</p> <ul style="list-style-type: none"> • Often staff would be confused over the reporting structures as they are unclear. • Sometimes duties would not be completed as staff may be confused. • Conflict of loyalty between line managers and project managers over the allocation of resources. • If teams have a lot of independence they can be difficult to monitor. • Costs can increase if more managerial posts are created. <p>1 mark per point used, 1 mark for an appropriate explanation</p>	(2)

Question Number	Answer	Mark
16	<p>Any two of the following:</p> <ul style="list-style-type: none"> • Design market research • Carry out market research • Find out what customers want to buy • Establishing customer needs • Advising on changes to products • Advising/communicating with R&D, production etc • Establishing market segmentation • Product positioning • Branding products • Providing product information to customers • Assisting/advising regarding pricing • Product placement • Advertising • Promotions • Selling • Sponsorships • Any other appropriate answer <p>Award 1 mark per correct answer, to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
17	<p>Any one of the following:</p> <ul style="list-style-type: none"> • To deliver products (1) to customers on time (1) • To deliver products (1) to customers in good/correct condition (1) • To avoid damage (1) to goods (1) • To avoid damage (1) to vehicles (1) • To avoid damage (1) to property (1) • To avoid injury (1) to self/others (1) • To drive/work within the law (1) such as loading weights, securing loads, speed, tachograph, rest periods etc (1 for any 1 example given) • Deal with all clients (1) and promote good customer relations (1) • Try to keep costs down (1) such as fuel consumption, route planning, oil/water checks etc (1 for any 1 example given) • Any other appropriate answer <p>Award 1 mark per correct answer, to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
18	<p>Any two of the following:</p> <ul style="list-style-type: none"> • To ensure profits are achieved (1) • To avoid losses leading to bankruptcy (1) • To minimise costs to ensure they stay within budget/target (1) • To act on deviations quickly to avoid future problems (1) • To avoid unnecessary waste (1) • To maintain a sustainable business over the longer period (1) • To be/remain competitive over the longer period (1) • Any other appropriate answer <p>Award 1 mark per correct answer, to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
19	<p>Any one of the following:</p> <ul style="list-style-type: none"> • Business becomes insolvent (1) as it has limited cash (1) • Business goes into receivership (1) as it has limited cash (1) • Business goes bankrupt (1) as it cannot pay its creditors (1) • Business has to borrow (1) more money (1) • Taking out new loans (1) may mean higher interest charges (1) • More interest to pay (1) on any extensions to loans (1) • Unable to pay creditors (1) so supplies dry up (1) • Any other appropriate answer <p>Award 1 mark per correct answer, to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
20	<p>Any one of the following:</p> <ul style="list-style-type: none"> • Profits can be made (1) as activities that generate profit can be maximised (1) • Cost targets can be achieved (1) as adjustments of activities can be made (1) • Investment is possible (1) as money is likely to be available (1) • Expansion is possible (1) as funds will be available (1) • New equipment can be bought (1) as funds will be available (1) • Refurbishment can be afforded (1) as funds will be available (1) • Labour force can be increased (1) as profits can be ploughed back into expansion (1) • Wages can be increased (1) as profits can be ploughed back into expansion (1) • Donations to charities etc. can be made (1) to raise the profile of the company (1) • Sponsorships can be made (1) to raise the profile of the company (1) • Dividends can be paid (1) to keep alive future interest in the company (1) • Loans can be paid/reduced (1) as funds will be available (1) • Any other appropriate answer <p>Award a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
21(i)	<p>The report should include reference to:</p> <ul style="list-style-type: none"> • payments exceeding the balance and receipts by £10,000 • negative cash flow situation • remedial action required <p>Award up to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark
21(ii)	<p>The advice should reference some of the following:</p> <ul style="list-style-type: none"> • Ensure any outstanding debts (1) are recovered quickly (1) • Ensure invoices are sent (1) to customers promptly (1) • Inform bank (1) about current status (1) • Seek overdraft facilities (1) at the best possible rate (1) • Seek a temporary loan (1) at the best possible rate (1) • Slow payments (1) to suppliers where possible (1) • Prepare a cash flow forecast (1) to avoid a similar problem in the future (1) • Reduce/stop any unnecessary planned expenditure (1) and tighten up on spending (1) • Any other appropriate answer <p>Award up to a maximum of 2 marks</p>	(2)

Question Number	Answer	Mark												
22(i)	<p>The template should be similar to the following</p> <p>Accept different formats if all headings are appropriate.</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Costs</th> <th>Sales</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> </tr> </tbody> </table> <p>Award 1 mark for appropriate columns and row structure Award 1 mark for correct headings</p>	Month	Costs	Sales	1			2			3			(2)
Month	Costs	Sales												
1														
2														
3														

Question Number	Answer	Mark												
22(ii)	<p>The completed template should be similar to the following</p> <p>Accept different format of template following through from (i)</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Costs</th> <th>Sales</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>100</td> <td>400</td> </tr> <tr> <td>2</td> <td>123</td> <td>400</td> </tr> <tr> <td>3</td> <td>110</td> <td>460</td> </tr> </tbody> </table> <p>Award 2 marks for completely correct table Award 1 mark for correct table with 1 error Award no marks for a table with 2 or more errors</p>	Month	Costs	Sales	1	100	400	2	123	400	3	110	460	(2)
Month	Costs	Sales												
1	100	400												
2	123	400												
3	110	460												

Question Number	Answer	Mark															
22(iii)	<p>The profit and loss statement should be similar to the following</p> <p>Accept different formats if all information and headings appropriate</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Profit</th> <th>Loss</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td></td> <td></td> </tr> </tbody> </table> <p>Award 1 mark for appropriate row and column structure Award 1 mark for correct headings</p>	Month	Profit	Loss	1			2			3			Total			(2)
Month	Profit	Loss															
1																	
2																	
3																	
Total																	

Question Number	Answer	Mark															
22(iv)	<p>The completed profit and loss statement should be similar to the following</p> <p>Accept different formats following through from (iii)</p> <table border="1"> <thead> <tr> <th>Month</th> <th>Profit</th> <th>Loss</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>300</td> <td>0</td> </tr> <tr> <td>2</td> <td>277</td> <td>0</td> </tr> <tr> <td>3</td> <td>350</td> <td>0</td> </tr> <tr> <td>Total</td> <td>927</td> <td>0</td> </tr> </tbody> </table> <p>Award 2 marks for completely correct table Award 1 mark for correct table with 1 error Award no marks for a table with 2 or more errors</p>	Month	Profit	Loss	1	300	0	2	277	0	3	350	0	Total	927	0	(2)
Month	Profit	Loss															
1	300	0															
2	277	0															
3	350	0															
Total	927	0															

Question Number	Answer	Mark
23	<p>An explanation to include three of the following points:</p> <ul style="list-style-type: none"> • Number of staff • Clearly defines each employee's role • Relationship with other employees known • Can have narrow spans of control at points higher in the organisation • Can have wider span of control further down the structure • Environment encourages the effective use of specialist managers <p>Award 1 mark per correct point to a maximum of 3 points</p>	(3)

Question Number	Answer	Mark
24	<p>Any two of the following:</p> <ul style="list-style-type: none"> • Marketing would feed customer requirements to design team (1) who would then prepare sample/prototypes/specifications for the customer (1) • Marketing would inform design team about new/competitor products (1) so they could be analysed/compared/copied (1) • Marketing staff suggest product improvements (1) to design staff (1) • Design staff could visit/make presentations to customers/potential customers (1) jointly with marketing staff (1) • Design staff could inform marketing staff (1) about new raw materials and processes to help with sales (1) • Design staff could assist marketing (1) with preparing technical sales materials and literature (1) • Any other appropriate answers <p>Award 1 mark per correct point made, to a maximum of 2 marks each description for 2 descriptions</p>	(4)

Question Number	Answer	Mark
25	<p>Any three references to:</p> <ul style="list-style-type: none"> • Finance for training • Learning new skills • Finance for promotion • Possibility of relocation to enhance opportunities • Increased status in the company • Any other appropriate answer <p>Award 1 mark per correct point, to a maximum of 3 marks</p>	(3)