MA1 Full Specimen Exam Answers

All questions are worth 2 marks

Question	Correct Answer
1	**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	**=B1*B3** Using the $ before a row or column reference anchors that reference. In this example the wage rate shown in B1 should be used in all cells from C4 to G4. Without the $ before the B, cell C4 would show =C$1*C3 which would be incorrect.
3	**FIFO** If prices are rising, the earlier purchases of material will be at a lower price than the more recent purchases. If FIFO is used, then the cheaper material will be issued first, leaving the more expensive material as closing inventory.
4	**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.
5	**Cost analysis** Computer spreadsheets are most useful for undertaking analysis of numbers. An expense coding structure and a product listing are lists which require no analysing. A staff appraisal would be more suited to using a word processing package.
6	**$543** Using LIFO, the material which has been introduced most recently is the first to be issued. For the issue on Day 5, the 110 units would have been taken from the receipt on Day 3, leaving a balance of 160 from the opening balance and 120 from day 3. The issue on Day 8 would be taken as 120 from Day 3 and 30 from the opening balance. The total cost would be (120 x 3.60) + (30 x 3.70) = $543
7	**$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 hour. Total production cost = $9.60 + ($13.40 x 0.5) = $16.30
8	**What-if analysis can be carried out easily and quickly** Spreadsheets allow what-if analysis to be carried out quickly and easily. With a spreadsheet containing formulae, the impact of changes to individual variables can be easy to see. The other options are not major advantages of spreadsheets.

9	**4,080** Each unit of product X requires 1.8kg of material. As there is a loss of 10% in manufacturing, 2kg (1.8/ 0.9) need for each unit. Total material required to manufacture 2,000 units = 4,000kg. In addition, 80kg are required in order to increase the inventory from 420kg to 500kg. In total 4,000kg + 80kg = 4,080kg need to be purchased.

10	**Organisation A – Job Costing; Organisation B – Batch costing** Job costing is useful in situations where each piece of work is unique and is costed separately. Every case taken on by the law firm will be different and require different resources, therefore job costing will be most appropriate. The pharmaceutical company produces identical tablets in batches, therefore batch costing is the most suitable.
11	**Overhead costs were under-absorbed by $1,080** The over or under absorption is the difference between the actual overheads incurred and the overheads absorbed. Overheads are absorbed using the overhead absorption rate (OAR). The OAR (based on the budgeted information) = $16,340/4,300 = $3.80 per machine hour. Overheads absorbed = $3.80 x 4,250 = $16,250. Actual overheads incurred are $17,230, therefore there is an under absorption of $17,230 - $16, 250 = $1,080.
12	**$67.50** Total cost for the batch = $15,000 + (150 x $20) + ($300,000/20,000 x 150) = $20,250. Cost per unit = $20,250/300 = $67.50.
13	**$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
14	**#DIV/0!** The error #DIV/0! Is shown when the formula in the cell attempts to divide by zero.
15	**Both 1 and 2** Pressing 'Ctrl' and 'F' at the same time will bring up the Find and Replace window. The window has a tab for Find, whereby text or values can be entered and any instances of these text or values in the spreadsheet will be highlighted. In the Replace tab text or values can be entered and any instances of these can be replaced automatically by alternative text or values.
16	**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.

17	**A decrease in the sales commission paid** A decrease in selling price (assuming this leads to an overall decrease in sales revenue), or an increase in costs in isolation would lead to a reduction in the operating profit margin. A decrease in costs, such as sales commission, would lead to an increase in the operating profit margin.
18	**0.5 times** Asset turnover ratio = sales/capital employed 50,000 / 100,000 = 0.5 times
19	**=SUM(B8:D8)** The total profit for the company can be calculated by added the profit figures for the three divisions.

	Option 3 would not calculate the profit for the company as it adds sales + variable costs + contribution + fixed costs. In options 2 and 4, the = sign is missing from the start of the formula.
20	**Dispatch of customer orders** Calculation of wages, control of trade receivables and payments to trade payables are all tasks which are likely to be carried out by an accounts department. Dispatch of customer orders is most likely to be carried out by the sales or stores departments.
21	**$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.
22	**50%** Operating profit margin = Operating profit / sales. Operating profit margin = 50,000 / 100,000 = 50%
23	**The contents of the brackets are calculated first** The order of maths calculations can be remembered as BODMAS (brackets, order, divide, multiply, add and subtract). Therefore, the contents of the brackets are calculated first.
24	**$156** The guaranteed wage of $50 will be used on days where the number of units worked are less than or equal to 100, therefore on day 2. The total wages for the three days will be (100 x 0.5) + 50 + ((100 x 0.5) + (10 x 0.6)) = $156
25	**To demonstrate formal relationships and communication flows** An organisation chart shows the people within the organisation and the communication and relationships between them.

26	**$26,241** Job 2 was completed during the period, so the work-in-progress at the end of the period will only relate to Job 1. The value of WIP will be the total costs of Job 1 to date, including opening WIP, direct materials, direct labour and Job 1's share of production overheads. Job 1's share of production overheads = ((4,360/(4,360 + 2,940)) x 9,855) = 5,886. Closing WIP = (5,269 + 10,726 + 4,360 + 5,866) = $26,241.
27	**3 only** 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.
28	**$63,000** Total indirect costs = $80,000 + $25,000 = $105,000. Cost centre B will pick up (12,000 / (12,000 + 8,000)) x $105,000 = $63,000.
29	**The information should be communicated to everyone in the organisation**
	Information should not always be communicated to everyone in the organisation, it should only be communicated to relevant people.
30	**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.
31	**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.
32	**2 and 3 only** Formatting data in a spreadsheet is done for the purpose of making the spreadsheet more visually attractive and easier to understand. Formatting does not change the content of the spreadsheet.
33	**1 and 2 only** Process costing is used in continuous production processes where the output of one process becomes the input of the next process. The process may create by-products or joint products.
34	**45%** Total time directly allocated to clients is 18 hours, which is (18/40) = 45% of total time.

35	**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 paid to the seller is $80 ($100 - $15 - $5). The sales tax figure of $15 is payable to the tax authorities. Sales can be analysed in different ways for management accounting purposes, for example by region, by product or by sales team member.
36	**1 and 3 only** Information should only be provided where the benefit of providing the information outweighs the cost of providing it.
37	**Staples to fit 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 number of staples used to fit 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.
38	**2 only** Production costs using FIFO will be lower than if LIFO was used. When prices are rising closing inventory values using periodic weighted average will be higher that those using cumulative weighted average.
39	**Inventory which is available for new orders from customers**

	Free inventory is calculated as inventory in stock + inventory on order – inventory scheduled for use. This is the amount which is available for new orders from customers.
40	**Overhead allocation** Overheads which relate clearly to one cost centre are allocated to that cost centre. Overheads which must be shared amongst costs centres are apportioned. Overhead absorption relates to the absorption of overhead costs to the final product.
41	**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.
42	**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.
43	**3 and 4 only** An entire page of rows and columns is called a worksheet. In a spreadsheet rows are defined by numbers and columns are defined by letters.

44	**$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.
45	**1 only** In an efficient coding system, codes should be a uniform length and structure and each code should be unique. Codes do not have to disguise the item being coded and do not have to include both letters and numbers.
46	**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.
47	**$22,800** The difference in profit between marginal and absorption costing is the change in inventory levels multiplied by the fixed production overhead rate. In a period where 25,000 units are produced and 28,000 are sold, the change in inventory level is 3,000. Therefore, the difference between the profits will be (3,000 x 7.60) = $22,800. As inventory levels are falling, marginal costing will give the higher profit.
48	**Semi-fixed cost** Semi-fixed costs, also known as semi-variable or 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 salary is a semi-fixed cost.
49	**2, 3 and 4 only**

	Setting selling prices is likely to be done by the sales or marketing departments and is not a task likely to be carried out by a trainee accountant.
50	**The trade receivables control account will be debited** The double entry to record the invoice will be to debit the trade receivables and to credit sales.