Management Information MA1 September 2021-August 2022 Examiner's report

The examining team share their observations from the marking process to highlight strengths and weaknesses in candidates' performance, and to offer constructive advice for those sitting the exam in the future.

Contents

General Comments

The intention of this report is that, when considered in conjunction with previous reports, candidates at future sittings will have a resource which maximises their chance of success. The most effective way to use these reports is to consider both the technical content of each question, and the approach to answering the question – noting that different question types will require slightly different approaches.

The examination consists of 50 objective test questions, each worth 2 marks. The purpose of this report is to provide illustrations of questions which have especially posed problems for candidates.

The six sample multiple-choice questions below cover different aspects of the syllabus. The approach to correctly answering each question is explained and the common incorrect approaches, along with the misunderstandings which they indicate, are highlighted. Answering objective test questions requires candidates to have both a clear understanding of the subject matter being examined and a logical approach.

Example 1

Sales of product Alpha during the next month are expected to be 35,000 units. There will not be any opening inventory of the product at the start of next month but by the end of the month, there must be a closing inventory of 4,000 finished units.

Each finished unit contains 1.9 kg of raw material. No inventories of raw material are held, and 5% of material input is lost in production.

What quantity of raw material must be purchased to satisfy the above requirements?

Choices:

1. **78,000 kg**
2. **62,000 kg**
3. **77,805 kg**
4. **61,845 kg**

The correct answer is 1. 78,000 kg

Production quantity = Expected sales – Opening inventory + Closing inventory. (35,000 + 4,000) = 39,000 units.

Each unit of Alpha requires 1.9 kg of raw material.

(39,000 x 1.9) = 74,100 kg. This is the amount of raw material required to produce the 39,000 units, however as there is a production loss of 5%, (74,100/0.95) = 78,000 kg is required to be purchased.

Incorrect answers are:

2. 62,000 kg
This answer incorrectly deducted the closing inventory of finished goods.
(35,000 – 4,000) = 31,000 units * 1.9kg = 58,900kg / 0.95 = 62,000kg

3. 77,805kg
This answer incorrectly calculated the loss.
(35,000 + 4,000) = 39,000 units * 1.9kg = 74,100kg * 1.05 = 77,805kg

4. 61,845kg
This answer incorrectly deducted the closing inventory of finished goods and calculated the loss incorrectly.
(35,000 – 4,000) = 31,000 units * 1.9kg = 58,900 * 1.05 = 61,845 kg

Example 2

Which of the following is/are characteristics of process costing?

(1) The cost per unit of output is only calculated when the process is fully complete

(2) The cost of good output does not include the cost of expected losses from evaporation or wastage

Choices:

1. (1) only
2. (2) only
3. Both (1) and (2)
4. Neither (1) nor (2)

The correct answer is 4. Neither (1) nor (2)

Process costing is used when there is a continuous production process. If costs are calculated at the end of a period, any units not complete may be calculated and costed as work in progress (WIP). Therefore statement (1) is incorrect.

The volume of expected losses (normal losses) is taken account of when calculating the cost of good output, as is any scrap value which can obtained from selling any wastage. The cost of good output is calculated as:

(Total input costs - scrap value of normal losses) / expected output

Therefore statement (2) is incorrect.

Example 3

The sales achieved by each of the 20 sales representatives in a company have been entered into column C of a spreadsheet, occupying cells C1 to C20. An appropriate formula has been entered into cell C21 to calculate total sales.

Which of the following formulae can be used to calculate average sales per representative?

Choices:

1. **=C21/20**
2. **=AVERAGE(C21)**
3. **=C21*0.05/20**
4. **=SUM(C1:C20)**

The correct answer is 1. =C21/20

To demonstrate, here is a spreadsheet extract showing random sales for the 20 sales representatives. The total is 800, meaning the average is (800/20) = 40.

	A	B	C
1	Sales Rep 1		88
2	Sales Rep 2		30
3	Sales Rep 3		53
4	Sales Rep 4		27
5	Sales Rep 5		92
6	Sales Rep 6		17
7	Sales Rep 7		22
8	Sales Rep 8		5
9	Sales Rep 9		51
10	Sales Rep 10		90
11	Sales Rep 11		40
12	Sales Rep 12		59
13	Sales Rep 13		44
14	Sales Rep 14		21
15	Sales Rep 15		9
16	Sales Rep 16		17
17	Sales Rep 17		35
18	Sales Rep 18		60
19	Sales Rep 19		27
20	Sales Rep 20		13
21			800

Each of the formulae has been entered into the spreadsheet:

23	1. =C21/20		40
24	2. =AVERAGE(C21)		800
25	3. =C21*0.05/20		2
26	4. =SUM(C1:C20)		800

Option (1) takes the total sales from cell C21 and divides by 20 to give an average value of sales per representative. This gives the correct average of 40.

Incorrect answers are:

2. =AVERAGE(C21)
This gives the overall total of 800 as it only averages cell C21. To use the Average function, the formula should be =AVERAGE(C1:C21)

3. =C21*0.05/20
Multiplying by 0.05 achieves the same as dividing by 20, therefore this has effectively averaged the total twice, giving a value of 2.

4. =SUM(C1:C20)
This gives the overall total of 800 as it simply the sum of the 20 sales values.

Example 4

Which of the following is NOT an advantage of a computerised accounting system when compared to a manual accounting system?

Choices:

1. Errors in source documents are identified more quickly
2. There is a reduction in the amount of paper used and stored
3. A wider variety of management reports can be produced in a timely manner
4. There is less scope for arithmetic errors

The correct answer is 1. Errors in source documents are identified more quickly

The type of accounting system used (computerised or manual) will not directly affect the occurrence of errors in source documents and these errors would not necessarily be identified any quicker in a computerised system. For example, an invoice showing a total of $200 has been entered into the accounting system. If it is subsequently discovered that the invoice total should have been $300, this would not be easily picked up regardless of the accounting system used.

The other three choices are all advantages of computerised systems compared to manual systems.

There should be a reduction in the amount of paper used and stored. All records are stored electronically and there is no need to keep duplicate files thus reducing the amount of paper used and stored.

A computerised accounting system should be able to quickly produce a wide variety of management reports. They should also have improved analytical capabilities allowing for the production of charts and graphs.

As computerised systems incorporate checks over data input and calculations, there is less scope for arithmetic errors. .

Example 5

The following is an extract from the list of accounts of a motor manufacturer:

Overhead costs	**Account codes**
Production	from 100 to 199
Administration	from 200 to 299
Selling	from 300 to 399
Distribution	from 400 to 499

Which of the following transactions, in relation to the list of accounts, is/are coded correctly?

Transaction	**Description**	**Code**
1	Wages of a supervisor in the finished goods warehouse	410
2	Wages of the human resources department staff	110

Choices:

1. **Transaction 1 only**
2. **Transaction 2 only**
3. **Both transactions**
4. **Neither transaction**

The correct answer is 1. Transaction 1 only

The wages of a supervisor in the finished goods warehouse is a distribution cost and thus it should be coded between 400 and 499. This has been coded as 410, so this is correct.

The wages of the human resources department staff is an administration cost and should be coded between 200 and 299. This has been coded as 110 which is a production cost, therefore this is coded incorrectly.

Example 6

The following information is available for product Beta:

Prime cost is $24 per unit. Direct labour is paid at a rate of $6 per hour. Direct labour cost is $18 per unit. Production overheads are absorbed at $5 per direct labour hour

Using absorption costing, what is the total production cost per unit of product Beta?

Choices:

1. **$39**
2. **$57**
3. **$114**
4. **$42**

The correct answer is 1. $39

Total production cost is made up prime cost (direct costs) plus overheads.

The prime cost of $24 has been given in the question. The production overheads are absorbed at $5 per direct labour hours. The number of direct labour hours is not given but can be calculated as direct labour cost of $18 divided by the direct labour rate of $6, giving 3 hours.

Prime cost	$24
Production overheads (3 hours x $5)	$15
Total production cost	$39

The incorrect answers are:

2. $57
This answer has incorrectly added the direct labour cost twice (this is already included in the prime cost figure).
($24 + $18 + (3 x $5)) = $57

3. $114
This answer has incorrectly used the direct labour cost of $18 as the basis of absorbing the production overhead.
($24 + ($18 x $5)) = $114

4. $42
This answer has incorrectly added the direct labour cost twice (this is already included in the prime cost figure) and has omitted the production overheads.
($24 + $18) = $42

Conclusion

Based on the performance of candidates in these questions, it can be observed that there were two major reasons for incorrect choices being made. The first is that there was a lack of awareness/understanding of fundamental issues in the syllabus such as the use of spreadsheets. The second is that the questions were not read carefully enough, which led to confused thinking.

Candidates preparing for future sittings are strongly encouraged to ensure that they have developed a clear understanding of the key points of each area of the syllabus and that they read carefully and think logically when attempting questions.