SECTION A

Some of the answers that follow in Sections A and B are fuller and more comprehensive than would be expected from a well-prepared candidate. They have been written in this way to aid teaching, study and revision for tutors and candidates alike.

These Examiner's answers should be reviewed alongside the question paper for this examination which is now available on the CIMA website at www.cimaglobal.com/e3papers

The Post Exam Guide for this examination, which includes the marking guide for each question, will be published on the CIMA website by early October at www.cimaglobal.com/e3PEGS

Answer to Question One

Rationale

This question examines learning outcomes from Sections A and C of the syllabus. Requirements (a)(i), (a)(ii), (b)(i) and (b)(ii) examine learning outcome C1(b) 'evaluate strategic options'. Requirement (c)(i) examines learning outcome A1(e) 'recommend how to interact with suppliers and customers'. Requirement (c)(ii) examines learning outcome C1(b) 'evaluate strategic options'.

Suggested approach

Requirement (a)(i) was a straightforward question, requiring candidates to use the revenues and variable costs provided in the scenario to calculate a contribution margin per sector in order to demonstrate the impact of the fixed costs upon the overall profit of B. It was important that candidates clearly distinguished between fixed costs and variable costs in order to identify a contribution margin. A slight complication in the question was to calculate the revised Hypermarkets sector contribution margin based upon it being closed at the end of September. However, this should have been a straightforward apportionment exercise.

Requirement (a)(ii) was a straightforward calculation based upon reallocating the regional office costs upon a different basis than provided in the unseen material i.e. based upon the proportion of sector revenues. Therefore, candidates should have recalculated the allocation of the €340m regional office costs across the sectors, based upon their proportional revenues and then produce a revised profit figure for each sector and in total.
Requirement (b)(i) firstly required a report format; therefore candidates should have considered the presentation of their answers within an appropriate report format structure.

Each argument put forward by the regional Managing Director should have been considered separately in terms of the positive and negative points of each. This required candidates to consider the unseen information provided as compared with the findings of the calculations within the answers to requirement (a). Therefore, a degree of assimilation and comparison of the information was required to answer this question.

For requirement (b)(ii), candidates were expected to consider the strategic impact of the proposed decision to close the Hypermarkets sector upon B’s future operations in Country W. Therefore, it was important that the answers should focus specifically upon the overall impact on B’s future viability in country W. This should have included a discussion of both the financial and non-financial implications of the decision. It should have included a range of possible implications such as the impact upon profit and the loss of the Hypermarkets contribution to the fixed costs, the effect upon the remaining sectors and the impact upon the stakeholders. The examiner was expecting a broad answer covering a range of strategic implications. Importantly, candidates were expected not only to identify the strategic implications but also to consider the overall impact upon B’s future operations.

Requirement (c)(i) was a straightforward application of the generic competitive strategies model, based upon the information relating to each sector provided by the examiner in the unseen material. Candidates were expected to evaluate the information presented in relation to the brand, customers, pricing and market share characteristics in the unseen scenario table in order to recommend an appropriate competitive strategy. A clear recommendation for each sector was required.

Requirement (c)(ii) was a straightforward question, requiring the candidate to discuss two limitations of Porter’s model of generic competitive strategies. This should have been based upon the limitations in relation to B and its own ability to apply the model to its own sectors.

Requirement (a)

(i) Table 1

<table>
<thead>
<tr>
<th>After closure of Hypermarkets</th>
<th>Supermarkets</th>
<th>Hypermarkets</th>
<th>Discount Stores</th>
<th>Convenience Stores</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
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<td>€ million</td>
<td>€ million</td>
<td>€ million</td>
<td>€ million</td>
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<tr>
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<td>30.00</td>
<td>12.00</td>
<td>88.50</td>
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<tr>
<td>Total variable costs</td>
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<td>45.00</td>
<td>36.00</td>
<td>321.75</td>
</tr>
<tr>
<td>Fixed costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>340.00</td>
</tr>
<tr>
<td>Regional office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(18.25)</td>
</tr>
<tr>
<td>Profit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(ii) Table 2

<table>
<thead>
<tr>
<th></th>
<th>Supermarkets</th>
<th>Hypermarkets</th>
<th>Discount Stores</th>
<th>Convenience Stores</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>€ millions</td>
<td>€ millions</td>
<td>€ millions</td>
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<td>85.00</td>
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<td>Profit/(Loss)</td>
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<td>61.50</td>
<td>(40.00)</td>
<td>2.00</td>
<td>29.00</td>
</tr>
</tbody>
</table>

* Allocated on revenue

Requirement (b)

Report
To: The Regional Managing Director of Country W
Subject: An evaluation of the proposal to close Country W's Hypermarkets
From: Management Accountant
Date: September 2012

(i)

This report addresses the following arguments put forward by the Hypermarket's Sector Manager.

1. *The current apportionment base of the regional office costs is unfair because these costs are not directly related to floor area but are more closely associated with the revenues generated by each of country W's four trading sectors.*

   The Sector Manager has not produced any evidence in support of his argument. However, with regard to the first cost, insurances €35 million, this is likely to have a relationship both to the sectors' floor areas and also their revenues. The second component of the regional office costs, property taxes €100 million, is likely to be related to floor area.

   No basis has been given for the biggest proportion of the regional office costs, B Supermarket's management charge €205 million.

Summary
This aspect of the Sector Manager's argument is supported in respect of insurances and property taxes.

2. *In terms of its trading performance the Hypermarkets sector is Country W's best sector.*
The table above shows that the Hypermarkets have:
- The lowest variable costs percentage of 58% 
- The highest contribution margin percentage of 42% 
- The highest aggregate contribution margin of €189 million 

**Summary**
The criteria above demonstrate that the Hypermarket sector is the best performing sector in Country W.

If the Sector Manager’s argument is accepted regarding the alternate apportionment base of revenue, the Hypermarkets also show the greatest aggregate profit and the highest profit margin. However, caution should be exercised in using these results as decision criteria as they combine operational performance with central cost allocations.

3. *If any sector is to be closed it should be the discount stores and the convenience stores because their combined forecast revenues in the year ended 31 December 2012 is only €420 million which is €30 million less than the Hypermarkets’ revenue.*

The results in table 3 show that the Discount Stores have:
- The highest variable costs percentage of 85%
- The lowest contribution margin percentage of 15%

And the Convenience Stores have:
- The second highest variable costs percentage of 70% (the same as Supermarkets)
- The second lowest contribution margin of 30% (the same as Supermarkets)

**Summary**
The selection of revenue as the criterion for making a decision about closing a sector is a naïve approach.

The most appropriate criterion, from a financial point of view, to use in making this decision is the sector’s ability to generate contribution which, other things being equal, leads to the highest profit. However, other strategic factors should also be taken into account and these are discussed below.

4. *The regional office costs are too high and they contain a lot of wasteful expenditure. The sectors should not have to pay costs which they do not understand and did not authorise.*

The Sector Manager has not expressed the reason(s) for his assertion about wasteful expenditure. In this regard his argument is not well-founded. There is a degree of validity to the criticism regarding the sectors bearing a cost over which they have no control. However,
the Sector Manager should realise that the Regional office costs do have to be paid and the sectors are the obvious place where this should occur.

Summary
The Sector Manager’s argument has a limited degree of validity.

(ii)

Strategic implication of closure
If the Hypermarket sector is closed in Country W, it will have a direct effect on the forecast trading results. Table 1 shows that the forecast trading profit of €29 million would become a loss of €18.25 million. This is due to the loss of the Hypermarket’s contribution margin of €47.25 million which would have been earned by the Hypermarkets’ sector if it had continued to trade throughout 2012. The proportion of the Regional office costs that had been allocated to the Hypermarket sector do not disappear if the sector is closed down: they are reallocated to the remaining sectors.

If the Hypermarket sector is closed down, this will impinge upon the remaining sectors’ ability to pay the Regional Office costs. Unless economies can be made or profits increased in the three remaining sectors their viability will be called into question. The decision to close the Hypermarket sector is likely to precipitate the total closure of B’s business within W. This would result in B having to forego any future profits which in 2012 are forecast to be €29 million.

There may also be an effect on the remaining sectors in Country W if the closure of the Hypermarkets sector is received badly by the consumers in Country W. This may dissuade consumers from purchasing products from B’s remaining stores. Other stakeholders such as the suppliers and the government in Country W may react badly to the closure. The suppliers might be concerned about the credit-worthiness of B and reduce their willingness to extend credit. The government may ask for repayment of any grants or subsidies it has given to B and it may sour its opinion of B which could affect B’s future business within Country W.

The Hypermarket concept is a new one in Country W and B’s brand is highly regarded in W. Currently, this sector generates a contribution of €189 million and it is possible that this could increase in future years if the sector is developed. The Hypermarket sector may have the potential to profitably transform B’s business in W. Without Hypermarkets, B’s business prospects in W look less optimistic.

If the Hypermarkets are closed, B is likely to incur withdrawal costs which may have a further impact on its business in W for the future.

The effects of closing the Hypermarkets will affect B not only in 2012 but also in years to come.

Conclusion
The decision to close Country W’s Hypermarkets should not proceed because:

(i) It would damage B’s profits
(ii) It would impede B’s future operations within Country W

Requirement (c)(i)
Porter’s model of generic competitive strategies uses the following categories:

- Differentiation
- Cost leadership
- Cost focus
- Differentiation focus

Supermarkets
This sector has a ‘very economical cost structure’. Therefore, it is reasonable to infer that B could attain a competitive advantage by following a Cost Leadership strategy: that is, it will thrive whilst charging industry average prices because of its reduced costs. It also has the option
of trying to increase its market share by undercutting its two rival's prices but still make a reasonable profit because of its cost structure. This option could be successful for B because the sector is price sensitive. However, this option has the danger that it could provoke retaliatory action from the two rivals and lead to a price war which could prove to be disadvantageous to all three market participants. However, the Supermarkets' very economical cost structure should enable it to withstand a price war better than many of its competitors.

B's comparative cost advantage emanates from the position of many of its supermarkets and this gives it the potential for following an alternative strategy, Cost Focus. This implies that it could cater for niche markets within its supermarkets and charge differential prices according to location. However, this strategy would detract from the national brand identity of the Supermarkets sector and for that reason is not recommended.

**Recommendation**
The supermarkets sector should follow a strategy of Cost Leadership.

**Hypermarkets**
B’s brand is highly regarded with a high reputation for quality. B currently has 85% of this market. The sector’s customers are affluent and willing to travel a considerable distance in order to buy high value, up market branded items some of which are exclusive to B. The sector’s customers value quality and are willing to pay a premium for it. B is already pursuing a strategy of Differentiation whether by design or by accident: that is, it is offering its customers products/services that are different from, or more attractive than, those of its competitors. B is in a powerful position because its offerings coincide with its customers’ preferences.

The main problem with the sector is that hypermarkets are a new concept in Country W and B only has one competitor which is trading at a loss. Thus, it is reasonable to characterise demand as being unsophisticated and competition as weak. The stimulus for the maintenance of B’s market dominance and improvement to its customer offerings will have to be internal to B.

**Recommendation**
This sector should follow a strategy of Differentiation.

**Discount stores**
This sector has a mixture of characteristics for B. Its brand is highly regarded and it has a limited range of branded and own branded products. Some of its competition is trading at a loss and is very badly organised. These characteristics suggest that a strategy of Differentiation could be successful for B in this sector and that it could charge a premium price for its products.

However, the sector’s customers are extremely price sensitive and expect prices to be lower than in the hypermarkets. Further, some of B’s competitors are strong; being very profitable, innovative and efficient. This is reflected in B's market share of 15%. For these reasons it is unlikely that B could successfully gain a competitive advantage over its strong competitors by following an overall strategy of Differentiation. This suggests that B, which does not have a cost advantage, should follow a Differentiation Focus strategy where it could concentrate on particular niches within the Discount Stores market, through its understanding of the market segment and the needs of those customers within it.

**Recommendation**
B's discount stores should implement a strategy of Differentiation Focus.

**Convenience stores**
The sector manager has referred to B being 'stuck in the middle'. When Porter developed his ideas about generic competitive strategy he cautioned against trying to satisfy customers in every possible way because this would lead to a lack of clear identity, the pursuit of competing strategies within the same organisation and a lack of success. This seems to be the position the discount stores have achieved. B has no clear identity, some of its convenience stores are leaders and others are laggards. This market segment is dominated by one national chain which with 65% of the market is dominant. B with a market share of 10% will find it difficult against this chain. However, the remainder of the market, 25%, is fragmented and this could be a most
rewarding area for B in which to compete. Thus, B is probably constrained into adopting a **Differentiation Focus** strategy because it:

- has no cost advantages
- is unlikely to be successful competing nationally against the market leader
- has some local dominances

**Recommendation**
B's Convenience Stores should follow a strategy of Differentiation Focus.

**Requirement (c)(ii)**
Porter’s model has received a wide degree of acceptance. It provides B with a structure which could help it achieve competitive advantage for its different sectors. However, the model has been criticised for the following aspects.

**Stuck in the middle**
Porter’s assertion that this is not a viable strategy is belied, to an extent, by companies which have entered a market as niche/Focus participants and expanded successfully using a mixture of strategies

**Simplistic**
The presentation of the model with its two axes of competitive scope and competency are not rich enough to capture the complexity of modern business and consumer behaviour.

**Restrictive**
The dominance of the models may restrict strategists’ thinking when other more innovative solutions could be more appropriate.

**Market volatility and turbulence**
These factors militate against Porter’s model which might restrict managers’ adaptiveness.

**Topicality**
The basic model was published in 1980 since when the business world has changed greatly. Strategic choice may be more complex in 2012 which inhibits the model’s utility.

*Candidates were required to give two limitations. More have been given in this answer as a teaching aid.*
Answer to Question Two

Rationale

This question examines learning outcome B3(b) 'evaluate ethical issues and their resolution in the context of organisational change'.

Suggested approach

Requirement (a) required the candidate to directly apply their knowledge of CIMA’s Code of Ethics to the three situations presented in the scenario. Candidates were expected to firstly identify the ethical principle which was potentially being challenged. Secondly, the candidate should have explained why they considered this ethical principle as being relevant to the given situation. Finally candidates were expected to clearly recommend whether the principle was in conflict with CIMA’s Ethical Code. A description of the Ethical Code was not required.

Requirement (b) was a straightforward question requiring candidates to demonstrate their syllabus knowledge of ethical conflict resolution. Candidates were required to present a series of stages within a procedure that WWW could use. Therefore, the answer should have focused upon an organisational procedure and not a procedure for any particular individual.

Requirement (c) required candidates to consider the mission statement of WWW, which focused upon fair trade and sustainability, to identify two other relevant ethical principles for WWW. The scenario identified a number of possible ethical considerations for WWW which could have been used as future ethical principles. It was important that candidates focused their answers upon relevant ethical principles directly related to WWW.

Requirement (a)

CIMA’s Code of Ethics (the Code) for professional accountants has five fundamental principles:

- Integrity
- Objectivity
- Professional competence and due care
- Confidentiality
- Professional behaviour

(i)

Situation 1

This situation contains a possible conflict with the fundamental principle of Integrity. This principle imposes an obligation to be straightforward and honest in all business relationships.

The Code amplifies this principle to include communications that:

a) contain a materially false or misleading statement

The very optimistic forecast may be misleading in view of the possible outcome of the legal action being taken against WWW.

b) contain statements or information furnished recklessly

The CEO prepared his forecast in a hurry and did not consult anyone else within WWW. He may lack significant information about WWW. These factors combined may have resulted in the forecast being a reckless one.

c) omits information where such omission would be misleading

The CEO omitted to tell his audience about the possible legal action with WWW's home government. As the outcome of this legal action could materially affect WWW's profit in 2013,
this is potentially misleading.

In respect of Situation 1 the CEO’s behaviour appears not to have been straightforward and honest. There is a conflict with CIMA’s Code.

(ii)

**Situation 2**
The Code’s principle of **Confidentiality** imposes an obligation to ‘refrain from disclosing outside the firm confidential information acquired as a result of business relationships’.

The information which WWW’s home government wishes to be disclosed is covered by the Code’s principle of confidentiality.

However, the Code modifies the restriction of confidentiality when disclosure is required by law: ‘for example, production of documents in the course of legal proceedings’. As this is the case in Situation 2, WWW should disclose the documents and this is not in conflict with the Code.

(iii)

**Situation 3**
Clearly, WWW accounting staff do not have a good working relationship with the accounting staff of ZZZ. This may have led WWW’s financial controller to have an unfavourable opinion of the joint venture and this may have led him to advise against its continuance even though the joint venture is a profitable one.

The Code has a principle of **Objectivity** and this imposes an obligation ‘not to compromise business judgement because of bias’. It may be that the financial controller has become biased in his judgement of the joint venture because of the operational problems it has caused him and his staff. This situation does represent a conflict with the Code.

**Requirement (b)**

WWW could use the following procedure to resolve ethical conflicts:

1. Assemble all relevant information.
2. Identify the ethical issues which are involved in the conflict.
3. Refer to fundamental ethical principles. These could be contained within CIMA’s Code, WWW’s Ethical Code, Mission Statement and Published values.
4. WWW should apply its internal procedures in enquiring into the ethical conflict.
5. WWW should investigate potential future courses of action and ask the following questions:
   - What alternatives exist?
   - Can the conflict be ameliorated?
   - What is the degree of conflict?
   - What are the consequences if the conflict is not resolved?
   - Which stakeholders will be affected by the conflict?
6. Carry out an internal consultation with affected parties.
7. If appropriate, obtain advice from professional institutes, for example CIMA.
8. Achieve a resolution.

**Conclusion**

WWW should be aware that there is not necessarily an optimal solution to all ethical conflicts as their resolution will consist of trading off the interests of one group of stakeholders against another. The best outcome which WWW may be able to achieve is a ‘least worst’ one.
Requirement (c)

The following fundamental principles represent aspects of contemporary thought which could be incorporated in WWW's ethical code. The first two principles reflect the aspiration in WWW's published Statement of Values '...(to) trade fairly and sustainably'.

Fair trade: defined as enabling producers in developing countries achieve better trading conditions. WWW could include this principle in its ethical code because it recognises that the needs of stakeholders, other than its shareholders, are of importance. The implementation of fair trading policies might also help towards the achievement of sustainability (see below). This principle might also be included in an ethical code because the company believes that there is an unequal and unfair division of the benefits of international trade and fair trade attempts to rectify this.

Sustainability: which can be defined as an aspiration to follow strategies that contribute to long-term success. The rationale for this recommendation is due to a growing social awareness of the importance of sustainability, that is, conducting business in a renewable manner. An example of this is businesses which endeavour to conduct their activities in a 'carbon-neutral' fashion. If business activities are not conducted in a sustainable fashion the lifecycle of the company will be limited.

As the awareness and appreciation of sustainability increases with consumers a company which has this principle in its ethical code may find that it leads to increased business.

Equality of opportunity: this could be embodied within WWW’s ethical code as a commitment to treat all people equally. The inclusion of this principle recognises that all societies have some disadvantaged groups which suffer from discrimination. A company might embrace this principle because of the moral values of its key stakeholders. Another reason for its inclusion is that a company may wish to be perceived as being socially progressive and this principle is a concrete example of that motivation.

Environmental integrity: which expresses the desire to minimise the company’s impact upon the natural world. The reasons for this recommendation are the same as those for ‘sustainability’.

Candidates were only required to recommend two principles. The others are given as a teaching aid. Any other appropriate fundamental principles given by candidates were credited.
Answer to Question Three

**Rationale**

This question examines Section D of the syllabus. Requirement (a) examines learning outcome D1(a) ‘recommend appropriate control measures’. Requirements (b)(i) and (b)(ii) examines learning outcome D1(d) ‘advise managers on the development of strategies for knowledge management and information systems that support the organisation's strategic requirements’. Requirement (c) examines learning outcome D1(e) ‘recommend changes to information systems appropriate to the organisation’s strategic requirements.’

**Suggested approach**

For requirement (a) candidates were first expected to demonstrate their understanding of critical success factors (CSF’s) by providing a definition. The answers should then have gone on to explain how the CSF’s of HHH could be incorporated into a measurable KPI. Examples of appropriate KPI’s, based upon the specific CSF’s of HHH were required.

Requirement (b)(i) was a straightforward question, requiring candidates to use the information provided in the scenario to identify those areas where a KMS could benefit HHH. The scenario identified a number of current problems within HHH relating to its use, or lack of use, of its current knowledge and information. Candidates were expected to identify and advise on the specific benefits of using a KMS for HHH. Generic benefits of a KMS were not awarded a pass mark as the examiner clearly required direct application to HHH.

Requirement (b)(ii) was a straightforward question, requiring candidates to use the information provided in the scenario to identify the potential problems of operating a KMS in HHH. The scenario identified a number of current problems within HHH relating to its use knowledge and information and therefore candidates were expected to identify and advise on the specific problems for HHH. Generic problems of a KMS were not awarded a pass mark as the examiner clearly required direct application to HHH.

For requirement (c) candidates were expected to define data mining and in particular to explain how data mining could be used to help improve student drop-out rates. Candidates were given information relating to that contained within HHH’s information system regarding its students and were expected to explain how this information could be analysed, using data mining techniques, to improve its drop-out rate. Candidates should have considered analysis such as trend analysis, forecasting and associations and relationships. Candidates could also have considered the potential actions that could be taken by HHH to improve drop-out rates.

**Requirement (a)**

Critical Success Factors (CSFs) are the limited number of areas which must go well if the university is to be successful. HHH’s CSFs are abstract and it would be normal to translate them into the concrete form of Key Performance Indicators (KPIs). KPIs can quantify HHH’s CSFs which enables them to be measured and performance can then be managed by means of targets, comparisons and feedback and feedforward.

Examples of KPIs for HHH are:

**Student performance:**

Number of first year students not completing their course;

Percentage of male students who drop out annually.

**Requirement (b)(i)**

Knowledge management has been defined as ‘the management of the information, knowledge and experience available to an organisation’. A knowledge management strategy would enable HHH to build on its existing knowledge and extend it further. A knowledge management strategy would imply that the university would make deliberate efforts to gather, organise, share and analyse its knowledge to contribute towards the university’s future
success.

If a knowledge management strategy was successfully implemented, HHH could expect to benefit from the following:

- An increased level of motivation from its staff as they would have the opportunity of reciprocal knowledge sharing with colleagues. Based on the example of SSS, a comparable university, this could lead to HHH's staff achieving more external recognition in the form of prizes, publishing more books and articles and being awarded research contracts. These potential successes could increase the job satisfaction of HHH's staff.

- If HHH's staff achieves greater job satisfaction, greater external success and increased levels of motivation, it is likely to influence the value they place on working for HHH. This is likely to lead to a reduced level of staff turnover as staff will be happier.

- If HHH implements a knowledge management strategy, this should lead to staff having new opportunities to share their knowledge and to collaborate with colleagues across the university. The stimulation which these new opportunities provide may encourage the staff to become more innovative.

The increased level of shared knowledge may lead to greater efficiency. If knowledge is no longer regarded as a personal possession and collaboration becomes manifest, HHH's staff may benefit and be enabled to work ‘smarter’.

Candidates had to provide only three benefits.

Requirement (b)(ii)

There are a number of areas where the introduction of a knowledge management system might encounter problems:

Social

- Within HHH there are barriers to sharing information because of the attitude of its staff. Sharing implies a different way of working and staff may be resistant to changing their existing work patterns. Staff may be unwilling to co-operate with an imposed knowledge management strategy.

- Some staff may become demotivated by the new strategy as they have previously regarded their knowledge as a personal possession, rather than something whose ownership is shared by the university.

- Some staff may feel that if they share their knowledge their status may be undermined within the university.

- If HHH's knowledge is to be shared, there will be winners and losers amongst its staff. The winners will be the staff who have little knowledge to share and will benefit from access to more productive colleagues’ knowledge. The losers will be the staff with the most knowledge to share who may resent their hard-earned knowledge being shared with less productive colleagues.

Technical

- HHH may not have a comprehensive information system which would facilitate knowledge sharing.

- There may be incompatible systems and/or working methods within the university which will be an impediment to knowledge sharing and management.

- Not all data held within the university is necessarily held in digital form. This makes its sharing difficult: if such data is to be digitised, this will involve the university in extra expense.
• HHH will need to decide how its data is to be archived and how its archive is to be managed and accessed. HHH may not have the skills to deal with this issue which implies the knowledge management strategy will generate further expense.

Candidates were required to give only four problem areas.

Requirement (c)

Data mining would allow HHH to analyse its data to discover previously unknown or unsuspected relationships, patterns and associations. Drop-out rates are a key factor in the ability to achieve its CSF of student performance. It would therefore assist HHH if it could analyse the performance of its best performing departments in this area in order to determine what the key factors are to learn from. HHH could use its data relating to its own students as well as data relating to students in other UK universities, which it could analyse and use to improve its drop-out rates.

Data mining will allow HHH to compare its results with other UK data. This would help HHH to identify potential solutions to drop-out rates in particular. Data mining could assist HHH in understanding what causes students to leave before completing their studies and make possible improvement to improve retention and student progression.

Data mining might be able to forecast the type of student that is likely to drop out. HHH could then use this to identify students most at risk of dropping out and offer them support and extra tuition and guidance. Data mining may permit HHH to identify associations, whereby one event can be correlated to another event. For example, poor performance in mock exams could result in failure in the final examination. Therefore, action could be taken to offer extra tuition and courses to these candidates.
Answer to Question Four

**Rationale**

This question examines Sections A and D of the syllabus. Requirement (a) examines learning outcome A2(b) ‘evaluate the strategic and competitive impact of information systems’. Requirement (b) examines learning outcome D1(a) ‘recommend appropriate control measures’. Requirement (c) examines learning outcome D1(b) ‘evaluate alternative models of performance measurement’.

**Suggested approach**

Requirement (a) was a straightforward question, using the information provided in the scenario to explain how the value chain could be applied by BBB. Importantly, candidates were also required to clearly explain how each element of BBB’s value chain helped to achieve competitive advantage. There was sufficient detail within the scenario to apply all nine categories of the value chain.

For requirement (b) the scenario provided a number of items of information which would be provided by the introduction of the Smart Tills. Candidates were expected to use this information to advise BBB how this information could be used to improve its profits. Therefore, it was important to consider how the information within the Smart Tills could be used and applied effectively by BBB in improving profits.

Requirement (c) was a straightforward question. Candidates were expected to apply their knowledge of project planning to the proposed introduction of Smart Tills. Candidates were expected to consider key elements of a project plan, such a consultation, project team management and initiation, training, implementation and post implementation activities. It was important that answers were applied directly to the introduction of Smart Tills.

**Requirement (a)**

Porter’s Value Chain is shown below:
BBB’s activities are categorised as follows:

**Primary activities** consisting of:

- *Inbound logistics*: BBB has invested in a robotic system to improve its material handling. This should reduce waste and contribute to a greater margin. BBB should be able to improve its service to its customers which will contribute to competitive advantage.

- *Operations*: BBB has trained all its staff in customer care and prefers to employ staff with experience gained from other fashion retailers. This ensures that, in this aspect of its operations, BBB is at least as good as its competitors and possibly better.

- *Outbound logistics*: BBB offers its customers the service that it will deliver their purchases to their home within 24 hours. Not all customers will take advantage of this but some will and it provides a distinguishing feature of BBB’s retail experience.

- *Marketing and sales*: BBB sends its regular customers special offers and invitations to fashion shows. In this way, it keeps its customers informed about BBB’s business which should enhance its competitiveness.

- *Service*: BBB will refund, without question, a customer’s money. This aspect of its after sales service should placate any dissatisfaction from its customers and contribute to competitiveness.

**Support activities** consisting of:

- *Firm infrastructure*: For BBB this consists of general corporate administration, management accounting and its management structure. All these aspects need to be in place and successful for the primary activities to be successful. If BBB is able to organise any aspects of its infrastructure better than its competitors, then it will have a potential source of competitive advantage.

- *Human resource management*: These are BBB’s personnel policies and training programmes. If these are successful BBB’s staff will offer their customers a good retail experience which will help BBB to outperform its competitors.

- *Technology development*: BBB carries out investigations of innovations in fashion retailing as retailing technology and customers’ preferences are quick to change. One result of these investigations has been the potential acquisition of ‘Smart Tills’ which should enhance BBB’s overall performance and competitiveness.

- *Procurement*: BBB believes it can best compete by offering a wide selection of high quality products. It is essential that BBB’s procurement activity can acquire the products that BBB’s customers will buy. Successful procurement is a vital part of competitive advantage.

**Requirement (b)**

**Smart Tills**

The Smart Tills will give BBB real-time information about its inventory turnover and balances. This offers BBB the opportunity to reduce its investment in working capital and to increase its responsiveness to its customer demand. Both of these aspects should improve profits.

The Smart Tills can provide an analysis of BBB’s sales transactions. This will enhance BBB’s understanding; for example, which dress is selling well, which shop has sold the most jackets last week? This greater and more timely knowledge will enable BBB to better understand and to meet its customers’ requirements which should improve its competitiveness.

The Smart Tills will report sales per staff member. BBB might use this information as the basis of an incentive scheme which could improve its profitability. It could also indicate areas where staff could benefit from training which could lead to better customer service and improved profitability. BBB could also use this information for internal benchmarking purposes which could lead to improved profitability.

BBB will be able to effect these improvements because the Smart Tills will give it detailed real
time information about each of its shops. With this new understanding of its business, BBB will be enabled to review, improve and possibly change its competitive strategy.

**Requirement (c)**

**Project leader/team**: BBB should appoint one or more people to lead the project. This could be either an internal or external appointment. BBB should ensure that the leader has experience in managing change and understands both the Smart Tills technology as well as BBB’s fashion business.

**Consultation**: BBB should consult the individual shop managers and explain why it is introducing Smart Tills. This is a significant change and not all of the 20 managers can be expected to welcome it. Therefore, BBB should be prepared to encounter some resistance to its introduction of the Smart Tills.

**Training**: the shop managers and their staff will need to be trained to use the Smart Tills. BBB should receive help from the supplier of the Smart Tills in familiarising its staff with the new technology. BBB’s project leader will have to plan over what period the Smart Tills are to be introduced and how this will happen: simultaneously or sequentially?

**Performance management**: the management accountant should revise reporting structures to use the information generated by the Smart Tills. Previously, it had not been possible to calculate the profitability of each individual shop. With the introduction of Smart Tills, this becomes possible and so the management accountant should take advantage of this and could, in future, produce a league table of shop profitability to help performance management.

**After sales service**: BBB should ensure it will be given adequate after-sales service by the supplier of the Smart Tills. BBB’s future business will be orientated around the Smart Tills and any breakdown could be critical for BBB. BBB should negotiate a service contract for the Smart Tills which cover response times for breakdowns.