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 April at www.cimaglobal.com/e3PEGS

SECTION A

Answer to Question One

Rationale

This question examines learning outcomes from across the syllabus. Requirement (a) examines learning outcome C1(a) 'evaluate the process of strategy formulation' and is designed to test candidates' knowledge and understanding of the role of project management in achieving organisational mission and values. Requirement (b)(i) examines learning outcome D1(b) 'evaluate alternative models of performance measurement' and is designed to test candidates' understanding of project performance evaluation. Requirement (b)(ii) examines learning outcome D1(c) 'recommend solutions to problems in performance measurement' and is designed to test candidates' ability to demonstrate an understanding of the impact on the reporting of financial information on the overall performance of the project. Requirement (b)(iii) examines learning outcome D1(a) 'recommend appropriate control measures' and is designed to test candidates' understanding of appropriate control measures in a project environment. Requirement (c)(i) examines learning outcome A1(d) 'recommend how to manage relationships with stakeholders' and is designed to test candidates' understanding of stakeholder management through application of the Mendelow matrix. Requirement (c)(ii) also examines learning outcome A1(d) and is designed to test candidates' understanding of stakeholder management strategies.
### Suggested approach

For requirement (a) candidates should firstly consider GAMESCO’s mission and values in order to determine where and how project management activities could assist in their effective delivery. This question requires candidates to demonstrate an ability to take information from the pre-seen material and then to apply their knowledge and understanding of project management to this information.

For requirement (b)(i) candidates are required to apply their knowledge of Earned Value Management to the calculations of project performance. All of the information required to carry out these calculations can be found in the unseen material. Candidates should attempt all of the required calculations in the order which they are presented in the question requirement.

For requirement (b)(ii) candidates are required to use their answers to (b)(i) and their knowledge of the role of a project accountant within a project environment, to discuss how the Project Accountant can contribute effectively to the on time and on budget delivery of the project. The calculations in part (b)(i) should assist in both of these.

For requirement (b)(iii) candidates are required to demonstrate their understanding of the project environment and must consider the key aspects of successful delivery of the project, other than cost. There are a number of clues provided both in the pre-seen and unseen material to help candidates answer this question.

For requirement (c)(i) candidates are required to identify and evaluate three relevant stakeholders in respect of the proposed legacy strategy for the gymnastics arena. This should be a straightforward question, requiring candidates to apply their knowledge and understanding of the Mendelow matrix to three of the stakeholder groups clearly identifiable from the unseen material.

For requirement (c)(ii) candidates are required to recommend strategies to manage the three stakeholders identified in answers to part (c)(i). Clearly candidates must build upon their answers to (c)(i) in this requirement, and make clear recommendations which are directly applied to each of the stakeholders identified.

### Requirement (a)

The role of effective project management is critical in achieving GAMESCO’s objectives as stated in its mission and its stated values. It is also essential to ensure that the buildings and facilities required for the Games are ready in October 2015.

The Board of GAMESCO has set out its own mission and values as follows.

“To deliver the Games successfully on time and on budget in accordance with the expectations of our stakeholders and in accordance with the mission of the GCC.”

Effective project management will ensure, through appropriate reporting and monitoring on the individual construction projects, that projects are completed on time and on budget. This will be done through effective project planning, reporting and control activities for each of the projects undertaken. Preparation of detailed project plans, critical path analysis and work breakdown structures (WBS) and the preparation of detailed budgets and cost reporting schedules for each project, should enable the successful delivery of the Games on time and on budget.

Effective project management also relies on successful project management teams across all of the many individual projects. Effective project team management will ensure that outsourced contractors, including building contractors, utility companies and specialised sports facility contractors, are brought in and complete each of the various stages at the right time, at the required quality standards and at the budgeted cost in order to have everything ready on time for the commencement of the Games in 2015.

As stated above, a further key criterion for the successful achievement of the Games is ‘on time’ delivery of all projects. Traditionally most building projects run over the planned time, but all of the Games projects must be delivered on time, as the Games will be held in October 2015 and no slippage of this date is possible. In order to prevent slippage of dates, extra contractors or additional
workers are often required. However, this clashes with the other objective of 'on budget' delivery of projects. This will be a key role of effective project management, in balancing these key project constraints.

Management of stakeholder expectations is more complex. The project managers of the individual projects will have limited contact with the whole range of stakeholders and will only be interested in the main stakeholders of the project for which they are responsible, rather than the whole Games.

Values:

“GAMESCO will work tirelessly towards achieving the mission set out by the GCC. In striving to achieve the GCC’s mission, GAMESCO will act fairly and responsibly with all its stakeholders, in particular its employees and partners, in order to generate trust and transparency.”

Effective project management reporting and communication should help to enable trust and transparency within projects and project teams. It is important that project managers clearly understand the requirements of the key stakeholders of each project and ensure that appropriate communications and activities are in place to ensure that all employees and contractors work effectively together. All project managers must treat their project staff fairly. This will again involve effective planning and regular and open communication both internally within and externally between the projects. Communication of and changes to deadline dates is key to the on time delivery of each project. All project teams must prepare and tender for all contracts required and appoint contractors fairly and based on a transparent set of criteria.

Clearly, effective project management is important to the successful delivery of the Games and to the achievement of GAMESCO’s mission and values. Close monitoring, control and management action will be required on projects to ensure that all activities happen as planned, are completed on time and cost overruns or time overruns are identified at an early stage in order to take remedial action.

Effective communication, between GAMESCO staff and with all contractors, good project planning and close monitoring of all construction work is essential to ensure that each of the Games projects is completed according to GAMESCO’s mission and values.

Requirement (b)(i)

<table>
<thead>
<tr>
<th>After 10 days</th>
<th>(1) Baseline</th>
<th>(2) After 10 days (50%) (BCWS)</th>
<th>(3) Actual after 10 days (ACWP)</th>
<th>(4) Earned value (BCWP)</th>
<th>(5) Cost variance (CV) (BCWP-ACWP)</th>
<th>(6) Estimate to complete (ETC)</th>
<th>(7) Estimate at completion (EAC)</th>
<th>(8) Final Cost Variance (Baseline - EAC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work (%)</td>
<td>100%</td>
<td>50%</td>
<td>40%</td>
<td>60%</td>
<td>100%</td>
<td>0</td>
<td>60%</td>
<td>0</td>
</tr>
<tr>
<td>Cost($)</td>
<td>1,600,000</td>
<td>800,000</td>
<td>820,000</td>
<td>640,000</td>
<td>(180,000)</td>
<td>984,000</td>
<td>1,804,000</td>
<td>(204,000)</td>
</tr>
<tr>
<td>Duration (days)</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

(8) Final Cost variance in percentage terms =-(12.75%) (C$1804K – C$1600K) / C$1600K

(9) Schedule Variance = BCWP – BCWS = C$640,000 - C$800,000 = (C$160,000). This is taken after 10 days of work have been completed on-site.

Requirement (b)(ii)

The Gymnastics Arena project’s financial reporting system will form the backbone of all reports and communication between the project team members, GAMESCO staff within the project and with GAMESCO overall. The Project Accountant will play an integral part in the regular communication of the budget and cost reporting information, which is critical to ensure that the project team is focused upon the schedule and financial control of the project.
The Project Accountant will promote good and effective communication throughout the Gymnastics Arena project team in a timely, regular and formalised way. This will create an expectation amongst all team members for high quality and regular communication on all aspects of project progress.

The use of regular and standard project variance reporting ensures consistency and improved understanding across the project team of project progress throughout its duration. In the answer to part (b)(i), the Project Accountant has used Earned Value Management (EVM) variance reporting to evaluate and measure project performance to date. EVM is a standard project management process used to identify variances in projects based upon the comparison of work performed and work planned and is most effective in cost and schedule control. It takes into account not only what has been done to date but also what value has been added for that effort and expenditure. The Project Accountant has presented three core calculations to assist in the analysis of project variances: Budgeted Cost of Work Scheduled (BCWS), Actual Cost of Work Performed (ACWP) and Budgeted Cost of Work Performed (BCWP).

These will identify to the project team the budgeted cost of the work that has been performed at a given point in time within the project schedule, compared to the actual cost of the work which has actually taken place up to that point. From this information can be identified the Cost Variance. For the ground works being undertaken by V, it is possible to identify that after 10 days (or 50% of the planned work) a negative cost variance of C$180,000 has arisen. This can then be further analysed to evaluate the final cost variance by taking into account the cost estimate to complete the work, based upon there being 60% of the work to complete and thus the extra resources required. The final cost variance is C$204,000 or 12.75% over the original baseline budget for the ground works. In terms of the schedule variance (SV), this is calculated from the BCWP – BCWS. For the ground works to date, this results in a variance of C$640,000 – C$800,000 = (C$160,000). A negative variance shows that this project is behind schedule. This is clearly important as this is the first activity being undertaken in the project and if this is delayed it will have a knock on effect on the schedule of all other activities which follow. A negative variance should alert the Project Accountant and the Project Manager to the need to take immediate action to bring the schedule back on track in order for the concrete foundations to be laid on schedule. Other contractors will have scheduled workloads and they must be given sufficient time to react to changes / delays in schedules if they are likely to occur. However, in this project, schedule delays cannot be allowed to occur and therefore this aspect of project reporting is critical to the successful delivery of the project.

The reporting of standard variance analysis within the project will identify both the cost and schedule variances associated with the main aspects of the work breakdown structure of the project and will assist the Project Manager and the project team in project forecasting and in identifying relevant control activities to ensure that the project remains on budget and on schedule. Clearly, for the Gymnastics Arena project, the monitoring and control of the schedule variance is a key project activity and an important role of the Project Accountant in reporting and closely monitoring this for all components of the project.

The Project Accountant also has a responsibility to ensure that all relevant stakeholders, both internal and external to the team, are kept informed regularly of the financial performance of the project. The Project Accountant is not only responsible for reporting the budget and cost performance to the internal project team members but also will report directly to the central finance function of GAMECO on the performance of the project. The use of a formalised and well-structured financial reporting system will enhance both internal and external communication of the financial progress of the project.

The Project Accountant will compare planned and actual performance to identify schedule and cost variances as soon as they occur. She will need to ensure that the project reporting system is updated daily for all activities that did or did not occur, and for all costs and invoices, so that these are compared to budgeted costs for the relevant activities. As in the case with supplier V, the results are being monitored after only 10 days of project progress which is critical if the project is to remain on time. If project reporting is carried out effectively, then corrective action can be taken in a timely way if reporting takes place frequently on the key project activities.

Again, taking the example of Supplier V, the Project Accountant can determine the additional resources that will be needed to complete the ground works within the required deadline and can also
determine the impact this will have on project budget. This will allow for effective discussion and negotiation with the contractor to ensure that effective action is taken quickly. The Project Accountant must evaluate cost over-runs at an early stage so that management action can be taken to try to bring each activity back within budget or to help management decide where costs can be saved on future project activities in order to compensate for early cost over-runs. It is essential that the Project Accountant works closely with project team members in order to monitor and compare costs for all of the separate stages within the project so that costs are directly compared to the budget for the activities completed.

Requirement (b)(iii)
Examiners Note: Candidates are only required to present three areas of performance in their answer. The examiners answer provided below is to highlight to candidates the range of answers which would be acceptable.

Schedule performance
A key area of project performance is delivery of the project on time. The project must be completed by the 1 March 2015 and therefore the management of all of the many activities and contractors have to be managed to meet this final delivery date. This will involve measuring the progress of the project in terms of agreed scheduled dates and deadlines for the delivery of key project components. Close monitoring and updates of the project plan is essential to track progress of the Gymnasium Arena against plan.

Performance indicator:
- % work complete to date versus plan

Quality performance
Another area of project performance is quality. The Games will be high profile and likely to be watched by millions of TV viewers and attended by many thousands of spectators. In addition, athletes will be competing at the highest level and therefore quality expectations will be very high. Therefore the management of quality of the final Gymnastics Arena must be managed throughout the life of the project to ensure that any quality defects are immediately highlighted and rectified. Re-works are likely to be costly and should be avoided.

Performance indicator:
- Number of rectifications or re-works undertaken per month/per supplier
- Cost of rectifications as a % of budget
- Average time to rectify defects

Sustainability Performance
Sustainability is clearly a major area of consideration as it is clearly referred to as part of the GCC mission statement (‘Achieve high levels of sustainability for the infrastructure of the Games and the environment in which they take place’). Therefore, sustainability measures must be built into the performance measurement system for each project. This is likely to involve the measurement of energy consumption, re-cycling of materials, sourcing of suppliers from local sources to reduce transportation.

Performance indicator:
- % unused construction material re-cycled
- Energy consumption per month (Mwh/month)
- % of locally sourced materials to total material used

Safety performance
Safety should be a key consideration for any project environment. Safety needs to be highlighted to everyone as the construction industry has a reputation of having one of the worst records for the number of industrial workplace accidents. Safety training may need to be provided for GAMESCO employees and even for some outsourced contractors. Safety training needs to be identified and checked. GAMESCO has also made project managers aware that safety should be a key project management consideration and therefore performance measures must be set to measure this and reported to GAMESCO. High levels of safety, through a keen project focus upon safety procedures,
will encourage confidence within the team and will also create a positive impression amongst stakeholders.

**Performance indicator:**
- Accidents per month
- Accidents per hours worked

**Requirement (c)(i)**

<table>
<thead>
<tr>
<th>Power</th>
<th>Interest</th>
<th>Local Residents</th>
<th>Local construction companies</th>
<th>Architects</th>
<th>Environmentalists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low power / Low interest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Low Interest / High Power</td>
<td>National Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>High power / High interest</td>
<td></td>
<td>GAMESCO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Candidates are only expected to evaluate any three of the following stakeholders:

**GAMESCO**

*High Interest/ High Power*

GAMESCO has high power and high interest as it will have a high degree of influence on the local authority’s decision. Additionally GAMESCO has a high interest in this as it will wish to deliver on the ‘legacy pledge’ made to the Government of C and has already stated that it wishes to convert the arena into a sports and leisure complex. Therefore to do anything different with the Gymnastics Arena will be seen as GAMESCO going back on its pledge. It will have a high interest as its reputation could be affected and bad publicity could damage the success of the Games if there is opposition to the arena’s final outcome before the Games commence.

GAMESCO is likely to have a significant amount of power as it has specifically stated that it wishes the Gymnastics Arena to continue for the benefit of the local community.

**National Government**

*Low Interest/ High Power*

The national Government of Country C will want the Games to be seen as an international success and therefore it will currently only be interested in the delivery of a successful gymnastics arena. It is unlikely to be highly interested in the decision at the moment but this may change later as debate and publicity about the legacy of the arena develops.

However, as the national Government of the country it is likely to have high power in influencing the local authority in making a decision.

**Environmentalists**

*High Interest/ Low Power*

They will have a high interest as the arena is clearly having a large impact on the environment, both now and in the future. They have already expressed an interest in the future of the arena as they wish the ground that it occupies to be returned to its wildlife habitat.

However, the environmentalists are likely to have limited power unless they form alliances amongst themselves and with public or other lobby groups.
Architects

High Interest/ Low power

They will have a high level of interest as they are already involved in the re-design on behalf of the local authority and also this is likely to lead to a significant amount of work.

However, they are unlikely to have a high level of power to influence the decision but are likely to be a strong ally for the local authority.

Local construction companies in Country C

High Interest/ Low power

These companies have relatively lower power but a high interest as they would wish to win the contracts for the re-development of the Gymnastics Arena into a new sports and leisure complex.

These companies have already expressed an interest in the work but do not hold any power as the decisions as to what will happen to the Gymnastics Arena after the Games lies with the local authority.

Local Residents

Low Interest/ Low Power

At the moment, the residents will be likely to have limited interest until after the Games are complete as they cannot yet see the potential results of the legacy.

They are also likely to have low power as individuals as they cannot influence the decision. This could change if they form alliances with environmental groups or lobby groups to campaign for or against the legacy development plans.

Requirement (c)(ii)

GAMESCO:

- Regular dialogue with the GAMESCO Board will be necessary in order to demonstrate the plans for legacy of the arena.
- The local authority (LA) needs to demonstrate how local support will be fostered.
- Need to use GAMESCO as a supporting ally for the continued use of a sports complex.

National Government:

- Similar strategies would be appropriate for the national Government as for GAMESCO. The LA does not want to encourage political interference from the national Government. Therefore regular communication and dialogue with government officials will be required.
- Regular plans need to be demonstrated for the overall development.

Local Residents:

- Minimal effort is required at the moment.
- But it will require some form of communication to ensure that interest stays in favour of the new complex.
- The use of the LA website and local media such as local newspapers would be a useful forum for local residents and the community at large.
- The LA must attempt to positively reinforce the benefits of the proposed sports and leisure complex.
- Public road shows and events in local schools and sports clubs.
- Encourage local support through communication of the positive message.

Environmentalists:

- Will require active participation – involve environmental groups in plans for land re-development.
• Involvement is important as they could be used as a supporting ally if communicated with correctly. The LA will want to involve the environmentalists in the design of the landscaping around the arena and the possible re-location of wildlife habitats elsewhere in the locality.

**Architects and local businesses/ contractors:**

• This stakeholder group should be involved in planning of the sports complex project.
• They could be used to assist in spreading a positive message throughout the local business community.
SECTION B

Answer to Question Two

Rationale

Requirement (a) examines learning outcome A1(e) ‘recommend how to interact with suppliers and customers’ and is designed to test candidates’ understanding of branding strategies. Requirement (b) examines learning outcome C2(b) ‘recommend appropriate changes to the product portfolio of an organisation to support the organisation’s goals’ and is designed to test candidates’ application of the BCG matrix. Requirement (c) examines learning outcome C1(a) ‘evaluate the process of strategy formulation’ and is designed to test candidates’ understanding of the generic strategies upon the product portfolio management.

Suggested approach

For requirement (a) candidates must clearly define and explain what is meant by a brand extension strategy and must use the information relating to G to demonstrate this concept. Importantly, the answer should focus directly upon how using a brand extension strategy can benefit G.

For requirement (b) candidates are expected to apply their knowledge of the BCG matrix to G. This should be a straightforward question, requiring candidates to analyse the information provided for each of G’s product SBUs and to then apply the product SBU to a quadrant of the BCG model. Importantly, the requirement asks candidates to ‘evaluate’ the product SBUs, therefore candidates must make sure that they do not merely map the SBUs but also evaluate the position of each SBU within the portfolio.

For requirement (c) candidates are required to demonstrate their knowledge and understanding of competitive generic strategies. This requires candidates to clearly define and explain the generic competitive strategy being adopted by G and then to clearly explain how this generic strategy has impacted upon the product portfolio of G.

Requirement (a)

G’s brand would be expected to have three elements:

- A name and a logo that is the G name and associated logo;
- A colour scheme associated with G;
- Associated attributes and benefits of the brand, such as high quality and unique product features.

A brand extension strategy refers to where an existing and recognised brand is applied to products across a wider portfolio, as G has successfully done with its PMPs, smartphones, PCs and tabs. The same G logo and features have been used for all of these products to associate them all with the same overall G brand and brand features.

The benefits to G of following a brand extension strategy are that firstly, the products become associated with each other and a clear identity is formed, with which customers can identify and is easily recognisable. Secondly, when a new product is launched, the product will have an immediate advantage as customers will feel an instant familiarity with it. Thirdly, it is an excellent marketing tool for G as the logo is associated with the whole range of products and customers who have purchased one product are likely to be instantly attracted to another product within the brand when it is launched. Therefore, existing customers will have brand loyalty and will be attracted to newly launched electronic products. This reduces the marketing and branding costs required to bring new products to the market. The assumption will be that they will be of equal or better quality and will be innovative products of the standard expected of that brand. Brand loyalty could help G to win back customers in
the lucrative PC market, as for example owners of tablets might want a compatible PC under the same brand umbrella.

Requirement (b)

<table>
<thead>
<tr>
<th>Relative Market Share</th>
<th>High</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Market Growth</td>
<td>Stars</td>
<td>Question mark</td>
</tr>
<tr>
<td></td>
<td>TAB</td>
<td>PC</td>
</tr>
<tr>
<td></td>
<td>Smartphone</td>
<td></td>
</tr>
<tr>
<td>Low Market Growth</td>
<td>Cash cow</td>
<td>Dog</td>
</tr>
<tr>
<td></td>
<td>PMP</td>
<td>None</td>
</tr>
</tbody>
</table>

G PMP: High MS Low MG = **Cash cow**

- The PMP is a highly popular product that has enjoyed massive growth and is in a mature market with an increased life cycle.
- The PMP is cash generating with no massive investment required, with the forecast of long-term sales potential following recent updates and increased features.
- To increase the life of the PMP will require further brand extension strategies, which have been successful in the past.
- The cash generated by the PMP products can be used to develop and launch other G branded products.
- This could be particularly important to support the smartphone as a direct follow on.

G Smartphone: High MS High MG = **Star**

- The smartphone has a good market share in a growing market.
- However, G needs to invest further in the smartphone if it is to continue growth and retain market position.
- The smartphone is in a highly competitive market and therefore further investment is critical to its survival and growth.
- G could consider a range of extension strategies which have previously been successful for the PMP.

G TAB: High MS High MG = **Star**

- The TAB has a high market share in a high growth market and there is large potential for further development.
- However the TAB is in a very competitive market.
- G needs to decide if further investment will be successful as the expected investment needed to grow this market is likely to be very high but the rewards equally high.

G PC: Low MS High MG = **Question mark**

- G has lost market share to competitors and its ability to compete is under question.
- G could invest more to gain a higher proportion of the market, but the market is very competitive.
- Therefore G needs to decide if it wants to remain in the PC market sector.
• The PC is complementary to other products so it may be unlikely that G will want to remove itself from the PC market but the costs of remaining in the market and developing the product further are likely to be high.

• However, in due course the Question mark could become a Dog. G’s management should decide to divest the product, or invest in it further, so that it could move to being a Star and ultimately a Cash Cow, although rapid technological innovation is likely to prevent this from happening.

Overall G has a strong product portfolio. It will require careful management, in that the failure of one product could affect the whole brand. Notably G does not have any dogs in its portfolio and this may be because G takes action to prevent its products falling into this category.

Requirement (c)

G has a clearly defined premium strategy: A firm’s scope can be either to target a niche market (narrow scope) or a mass market (broad scope); and their strategy can be based on low-cost or differentiation. G has been very clever with its choice of strategy, depending on the position of the product in its life cycle. Initially G used a Differentiation Focus strategy while G only sold PCs. G’s PCs were niche and this strategy was appropriate whilst it was targeting the ‘Early Adopters’ of personal computing technology.

Those who adopt new technological products act as opinion leaders who spread word-of-mouth promotion about the product. Good word-of-mouth then attracts the ‘Early Majority’, where the bulk of sales come from. By launching the G TAB, G smartphone and G software products to the same audience, G has built up integrated customer relationships across multiple products, and therefore created brand loyalty. This increases the likelihood of new products being a success and the ability to move away from a niche focus towards a pure differentiation strategy.

As such, G appears to have moved towards a differentiation strategy as a wider range of consumers are now more aware of and are buying the G brand. This is evidenced by the PMP and G smartphone being bought by a wide range of consumers who are still prepared to pay a higher price than that charged by G’s competitors. G now operates using a differentiation strategy, using the G brand as a way to market all of its products at a premium price compared to its rivals. G’s brand differentiates its products through various ways including superior design, by giving customers additional features, colours and faster processing that sets its products apart from those of its competitors.

G customers are happy to pay a premium for quality and are likely to buy all of the products in the range. If you have a G TAB you are also likely to have a G smartphone or a G PMP.

In terms of the product portfolio G must make sure that it focuses upon quality and premium price to ensure that all products support each other in the portfolio. Levels of quality and brand expectations must be the same for each product and their extensions. This sets G apart from its rivals and gives its portfolio a competitive advantage and is also likely to allow it to extend the life cycle of the products. This is critical in a highly competitive market where life cycles are short and quality expectations are high.

By operating a differentiation strategy, G needs to continually invest in innovative designs, features and benefits so that G’s increasingly demanding customers can stay loyal to the G brand and not switch to competitors. Similarly G needs to effectively market the new features it offers in order to attract new customers and increase its market share. In today’s highly technological world, with sophisticated electronic products, many customers are loyal to a brand once they have selected their first product. So marketing needs to be aimed at the younger generation so that brand loyalty can be built and maintained for these young purchasers of electronic equipment.

Furthermore, G’s managers need to continually manage its SBU’s so as to try to move them all to be cash cows, or to divest them when they have become problem children, before they deteriorate further. Products in a dog SBU would not be suitable for a differentiation strategy.
The need for investment, and cash usage, for developing new innovative products, or new features for existing products, is key to maintaining market share. G’s management needs to focus on the needs of its target customers and what this category of customer wants or thinks it wants. Marketing is about creating perceived desires. Many people who own high technology products, purchase a particular brand because of certain features, which they often do not even use but are prepared to pay a premium for.

There is a need for G’s management to be able to communicate and understand the trends and desires of young consumers, as they will be G’s future customers, and G should aim to gain brand loyalty with them as early as possible.

By launching the TAB product, G has been enabled to move into the new and growing tablet computer market. This may also enable it to build the G brand and to encourage some customers to switch their PC's to a G PC. G’s management needs to ensure that there are clear distinguishing features between its products and those of its competitors. This differentiation may be through design rather than just features / functions such as colour, computer-screen technology or weight of the product.

Overall the management of the G portfolio of products requires investment in innovative designs, carefully targeted marketing, careful management of its product portfolio and continuous monitoring of competitors’ products.
Answer to Question Three

**Rationale**

Requirement (a) 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’ and is designed to test candidates’ application of knowledge of the implementation of knowledge management systems. Requirement (b) also examines learning outcome D1(d) and is designed to test candidates’ understanding of approaches to implementing a knowledge management system including outsourcing as an appropriate option.

**Suggested approach**

For requirement (a) candidates are required to apply their syllabus knowledge of Knowledge Management Information Systems (KM IS) to B. This requires candidates to clearly consider a range of benefits to B and difficulties for B of a KM IS. It is important that answers are directly applied to B.

For requirement (b) candidates must make sure that they cover all aspects of the requirement. Candidates must consider the advantages and disadvantages of both outsourcing the developing of the KM IS and the advantages and disadvantages of outsourcing the day to day management of the KM IS. This question is detailed and complex and therefore candidate should structure their answers as clearly as possible to make sure that they address all of the elements of the requirement.

**Requirement (a)**

**Benefits of KM IS TO B**

- A KM IS allows data for all aspects of B’s business to be fully integrated and includes operational, logistical and financial data. This helps the managers and staff of B in all departments to share and access information on all aspects of the company. This should reduce inefficiencies and duplication that B is currently encountering and therefore allows B to remain highly competitive.

- A KM IS should increase B’s ability to compete and add value to customers by better understanding their needs with real time business data. This is vitally important in a fast moving and developing industry such as this. B places great emphasis on satisfying its customers’ individual needs and this could be significantly improved by the use of a real time, customer-focused KM IS.

- A KM IS has the potential to increase workforce motivation of B’s staff, if they are working with better systems with an improved knowledge base. Greater knowledge and skills dissemination should improve knowledge levels throughout B.

- A KM IS allows B, as a growing business, to have all of its IT systems integrated with all users able to gain the required knowledge from one system with confidence in the integrity of the data. This should encourage a culture where B employees are encouraged to innovate and use knowledge to improve efficiency through integrated knowledge based systems. Innovation is a critical success factor for B, as identified in its website and therefore this system should encourage greater innovation.

- A KM IS will help B’s senior managers understand all aspects of its business and understand the changing needs of its customers better, through the provision of an integrated knowledge base. This should help B to compete more effectively.

- By sharing the same information, this eliminates the need for different users to have spread sheets with different values for the same data and eliminates confusion, duplication and
inaccuracy of data input (providing the information held is accurate) and ensures company-wide usage of identical data. This will enable B to grow and increase its sales and market share and not to suffer problems due to its IT systems holding back its growth potential.

Difficulties of KM IS FOR B

- There may be technical barriers to overcome such as the need to roll out a suitable information network across B and the disruption that replacing existing software and spread sheets will cause in the short term.

- Transfer of data to the new KM IS may lead to errors, omissions or inconsistencies. However, if carried out by experts of Z this risk should be eliminated if successfully managed. However, it is likely to take up a great deal of management time and may detract B senior managers from managing the business.

- B must decide whether to use company Z for designing and implementing the new KM IS or to also use Z as an outsourcing company to operate the system and to cut down B’s internal IT department. This will have implications on cost, control and possible redundancies of in-house IT staff and motivational issues.

- There are likely to be social barriers to information sharing in B. There are a range of different areas of expertise amongst the staff within B who may resist their knowledge being shared with others as it reduces the exercise of their expert power.

- This could lead to demotivation of staff particularly the IT staff of B, as they may feel undermined and particularly threatened by this development.

- If a new KMIS is to be designed and developed for B, will it achieve all its specific requirements as a growing company? By the very nature that B’s business is growing fast, it may not be possible to foresee all of the requirements that may be needed in the future.

- B has a wide range of customers throughout the world; from small independent catering outlets to large multinational food retailers. Can the new system cope with these two extremes of customer types, some operating across many countries?

- How quickly and in what direction is its business growing? The more specific a new IT system is for a company, or a specific industry (catering products), the less flexibility there will be for future changes in the business if B were to diversify in the future into a related industry sector, such as baking and cookery products, rather than just food packaging products.

- The systems development process will require significant involvement from B’s staff at all levels across the business and this may affect B’s ability to manage its growing business, as all of its staff will be busy. Deciding on IT specifications is vitally important to get right and end user input at an early stage of development is necessary but can be time consuming for busy managers. This may result in B having to recruit more employees, or to temporarily promote some employees, in order to free up management time for system specification work.

Overall, it would seem highly appropriate that B should invest in a KM IS, as clearly it is a growing business and its current information systems are not capable of sustaining this growth. Without further development and improvement of its current information systems, there is a high chance that the business could fail to survive in this highly competitive and technological industry.

Requirement (b)

(i) The development and implementation

Advantages

1. Contractual control
An advantage with using Z is that once the specifications have been agreed, a price and a date can be contractually agreed with Z. In-house system development is often fraught with delays and
problems, as the focus on delivery of a new IT system is not laid out with a contractual agreement for an agreed price.

2. Develop internal staff
A large project such as this KM IS development requires skills that B staff do not possess. On-site outsourcing of the project will bring people with the skills B need into the company. These people can work alongside B’s staff, helping them to acquire a new skills set. Z would have access to a large pool of IT programmers with a wealth of experience which can be used to ensure on-time delivery of the new IT system. The use of in-house IT employees makes B too dependent on a few key individuals, who could leave B during the development phase.

Disadvantages

1. Resistance by B’s staff
B’s staff, in particular the IT department, will feel undermined by the use of an external contractor to develop the new KM IS. This may result in the loss of staff or a reluctance to get involved in the development process. Staff may not want to pass on their knowledge and expertise to external developers and this may hinder the process and add significant costs.

2. Cost of development and implementation
Outsourcing the development and implementation of a KM IS is likely to be very expensive. The costs involved in the negotiation and legal set-up of the contract are likely to be very expensive and the management of the service level agreement (SLA) could be a major obstacle for B. The implementation process is expected to take one year and is likely to involve a number of on-site experts and designers from Z working closely, on a day to day basis, with B’s staff. This will be very expensive.

(ii) The day to day management

Advantages

1. Focus on core activities
Outsourcing will allow B to focus on the activities that are most important. IT development and management is not a core activity to B and therefore it may be an advantage to outsource this to an expert, such as Z, in order for B to focus upon its core business activities of design and development of sustainable packaging.

2. Cost and efficiency savings
Back-office functions, like IT, are often complicated in nature, but the size of B does not allow for it to perform the IT function at a consistent and reasonable cost for its needs. By using Z, this cost could be saved and efficiencies improved through the use of experts who can operate at a lower cost.

There could also be the benefit of economies of scale – if Z is managing its Knowledge Management Information System for other clients it should be able to offer this at a price more competitive than using B’s current in-house IT department, as it should be able to achieve economies of scale.

For example, Z could provide a 24 hour help desk to answer B’s queries, as well as queries from other clients. Z should be able to provide a better quality and lower cost help desk than B’s IT department could provide itself in-house.

3. Operational control
Z is an internationally renowned system development and management company and as such has extensive experience and has built up a good reputation with a large range of companies around the world. An outsourcing company like Z could bring better management skills of the KM IS to B than would otherwise be available internally.

4. Ongoing management of IT systems
As developers of the system, Z will know all aspects of the capabilities of the system and how information is stored and can be extracted and sorted.
Therefore, Z will be able to help B’s managers with queries and report generation and random search information, as it will have a better understanding of how to access the data held. It will enable managers to have a quick and knowledgeable contact point in Z to answer questions, especially in the first few months after implementation.

**Disadvantages**

1. **Loss of managerial control**
   B will be handing over the management and control of the IT function to another company. B will have a contract, but the managerial control will belong to Z. Z may not be driven by the same standards and sense of mission built around sustainability that drives B. Z will be driven to make a profit from the services that it is providing to B and the ethos of the two companies may disadvantageously contrast. This could cause operational and cultural issues between the two businesses. Z will have many clients that it manages IT systems for and B may be just one client and may not get priority if there are problems. B maybe one of many smaller clients of Z and could receive a poorer quality of service than B expected or requires. A detailed SLA should be put in place in order to try to stop this from occurring.

2. **Hidden costs**
   B will sign a contract with Z that will cover the details of the service that Z will provide. Anything not covered in the contract will be the basis for B to pay additional charges. Additionally, B will have to pay legal fees to retain a lawyer to review the contracts signed. Z is an experienced outsourcing company. It will have done this before and it will write the contract. Therefore, B may be at a disadvantage when negotiations start.

3. **Threat to security and confidentiality**
   The life-blood of any business is the information that keeps it running. B will hold vast amounts of confidential information that will be transmitted to Z, and therefore there is a risk that the confidentiality may be compromised. Evaluation of the outsourcing company is needed to make sure B’s data is protected and it is essential that the contract has a penalty clause if an incident occurs so as to provide some compensation.

4. **Quality problems**
   Z will be motivated by profit. Since the contract will fix the price, the only way for Z to increase profit will be to decrease expenses. As long as Z meets the conditions of the contract, B will pay. In addition, B may lose the ability to rapidly respond to changes in the business environment. The contract will be very specific and B will need to pay extra for changes.

5. **Reliance on outsourced staff**
   If outsourced, B would not have access to IT staff experienced with the IT systems upon which the entire B company is dependent. Can Z deliver the maintenance service required for such a strategically important IT system? This is especially important, as all of B’s sales are made online. It could be catastrophic if the IT system were to crash and for customers to be unable to access B website to place sales orders for any length of time.

6. **Tied to the financial well-being of another company**
   Since B will be turning over a significant part of the operations of the business to Z, it will be tied to the financial wellbeing of Z. More power given to Z over B’s IT systems and long term tie in, will make any proposed move to another IT company in the future difficult.

7. **Demotivation of the staff**
   Outsourcing will inevitably lead to loss of staff in B. This is likely to lead to demotivation of remaining staff and concern for their own job safety. Once the move to outsource the management of IT systems is made it is difficult to bring it back in-house if B experiences operational problems with Z. B must consider carefully the long term management of the KM IS as it clearly will be an integral part of its development and future success. This is likely to be a highly strategic business information system which should be managed internally. B should consider the development of its own team of IT experts to run the KMIS internally. Clearly this will require future and ongoing investment in the development of its own IT function and greater emphasis placed upon the KM IS’s strategic importance to the business.
Answer to Question Four

Rationale

Requirement (a) examines learning outcome B1(a) ‘discuss the concept of organisational change’ and is designed to test candidates’ understanding of the triggers of change in an organisation.

Requirement (b) examines learning outcome B2(a) ‘evaluate approaches to managing change’ and is designed to test candidates’ ability to evaluate the impact of culture on a change programme.

Requirement (c) examines learning outcome B3(b) ‘evaluate ethical issues and their resolution in the context of organisational change’ and is designed to test candidates’ understanding of the ethical context of public sector changes.

Suggested approach

For requirement (a) candidates need to consider those factors within M’s internal and external environment which are driving change. It is important that these factors are explained in relation to M and not merely listed.

For requirement (b) candidates are required to consider the cultural barriers to the change process in M. Candidates may wish to use the cultural web to help structure their answer to this question. Candidates are expected to consider a wide range of cultural issues, many of which are highlighted in the scenario.

For requirement (c) candidates are required to consider the ethical factors relating directly to the four-point plan outlined by the Chief Executive. Candidates are not expected to apply CIMA’s Ethical Code of Conduct to answer this question. Rather, candidates are expected to consider the general ethical context of the decisions being made and their potential impact upon the staff and society in general and whether there are any potential ethical challenges to consider.

Requirement (a)

External drivers for change

- Economic downturn in Country M has clearly had a significant impact upon the need for change throughout the whole public sector environment.
- The central Government of Country M has put pressure on C by reducing funding over the next 2 years.
- Central government expectations on how the public sector should be run are also driving change. The central Government’s desire to encourage local authorities to work collaboratively with private sector companies in order to deliver services will inevitably lead to a change within C.

Internal drivers for change

- The new Chief Executive (CE) appointed with private sector experience is wishing to change the bureaucratic culture and structure of C.
- There is a clear need to change the culture and improve the decision making process in order to cut headcount within C to meet the required central government targets.

Requirement (b)

1. C’s current culture is highly bureaucratic with many levels of authorisation. Therefore, its staff will feel secure in the bureaucratic culture and be fearful of and resist any changes proposed, as they will worry about their job security and the effects on the community they serve. The bureaucratic culture is also partly imposed by the need for many decisions to be made by local authority (LA) elected members rather than staff. The CE will need therefore to not only deal with staff resistance but also handle the potential problems of dealing with elected representatives who also may resist change and claim they have an elected mandate to perform their role.
2. C also has many managerial levels, which is likely to mean that it is slow to make decisions. However, change needs to happen quickly in C. Therefore, the current organisational structure element of the cultural web may hinder effective change in C.

3. Many staff have only ever worked for C. They are unlikely to be familiar with transformational change. Recent history has indicated a period of growth and not cuts. Therefore, this is a clear departure from what they are used to. Staff and senior management are unlikely to want to change the current status quo. Transformation and collaboration, both required by the central Government are not part of the current culture and therefore may be difficult to encourage in C.

4. Also a bureaucratic culture is likely to mean a culture which is directive and not consultative. Staff may not feel comfortable with involvement with the change process and prefer simply to be told what to do. However, some may in fact embrace a change process.

5. The most important and useful way to implement change is the use of ‘change agents’ and ‘champions for change’. C could appoint experienced change agents, from an external consultancy, to help bring about change and agree on how C could work collaboratively with private sector companies. However, staff may resist the interference of a change agent as they will not have had experience of working with a change agent before.

The very nature of C’s bureaucratic culture will make change difficult, as it is a slow moving organisation, not used to making decisions quickly. The central Government has imposed a 2 year deadline to reduce costs and therefore it has a tight deadline for change to be brought about. This will be very difficult to do in reality.

Requirement (c)

The public sector has a number of complex considerations to make when making decisions relating to service provision. There is also a need to consider the value for money (VFM) concept of Economy, Efficiency and Effectiveness. C must now work within a restricted budget but must still attempt to present a wide range of services at an expected level of quality. Some of these services C will be obliged to provide as its minimum level of service is set down in law. Within this, C is likely to face a range of ethical challenges. This can be illustrated through the use of the Chief Executive’s four-point plan.

1. Efficiencies through joint working with private sector partners

The main focus of private sector partners is profit and therefore there is an immediate conflict between the balance of service provision and profit targets.

For example, a private sector company dealing with recycling may wish the collection of recycled materials from households to be pre-sorted by type of material (glass / tins / paper etc.) and may only want to collect on a bi-monthly or monthly basis or to require households to deliver recycled materials to local collection points. This may clash with C’s objective perhaps of increasing the levels of rubbish recycled or differ from C’s current collection frequency resulting in a poorer service to local households.

It may result in greater costs or less convenient services for customers. Private sector partners are likely to operate with a focus on profit which will be different from C and this may create an ethical dilemma for C. However, C may in fact be able to learn from private sector partners.

2. Management and staff savings through redundancies

Redundancies are likely to be highly contentious in C and must be handled carefully and sensitively. There needs to be a fair and transparent system in place to reduce C’s headcount. Voluntary redundancies should be offered with fair terms especially for long term employees. Ethical considerations must be made in terms of the process of redundancies. Many of C’s staff are part-time and have only worked for C. As C has many part-time staff it may be possible to cut headcount in many departments by reducing the proportion of part time roles but this should be handled carefully and sensitively and with collaboration with unions. All redundancies must follow the proper and due process and be transparent, rather than on say the whim of particular departmental managers. C
needs to give consideration to the situation of the staff members being made redundant and offer re-training and/or advice on re-employment opportunities in the local area. As stated, many of C’s staff have never worked outside of the public sector and may need advice and training in how to apply for jobs or attend interviews.

Unions should be asked to recognize that funding is being cut and headcount reductions will enable C to carry on operating with fewer cuts to services if administration headcount is reduced first, thereby enabling the impact on the local population, which is C’s primary objective, to be minimised.

3. Increase income from services provided (e.g. increasing the price of car parking charges and school meals)

Increasing prices for local services may also cause ethical issues for C. Many local services, such as local parking in town centres, school meals and library services, are often very highly subsidised. If prices are increased this could impact on the poorest sectors of the population it serves, such as the elderly, unemployed and students. Therefore, C must carefully consider the services it chooses to increase prices for, as it may have a significant effect upon its customers and the community.

Increasing the price of school meals is likely to be unpopular but it may be the only viable solution and not necessarily unethical, if it means that the costs can be covered and the service maintained.

However, to increase the cost of car parking is a reasonably fair way to generate extra income but the increase needs to be set at a reasonable level and notified in advance. So a 10% increase in parking charges would be more ethical than a 50% increase. Perhaps a new charge structure based upon location of the car park could be introduced to reflect the popularity or usage of the location. Concessions could be offered to local workers who require regular use of parking facilities and for the elderly or less able bodied.

Compromises need to be made after suitable consultation with the local population which the service affects.

4. Service reductions (e.g. the closure of a number of local libraries and local authority run leisure centres)

These decisions are likely to be the most difficult and ethically challenging for C. However, with the central government funding reduction it is perhaps inevitable that some services must be cut. It is never fair for any services to be cut, as it will cause hardship or inconvenience to those using the service.

As a public sector provider, C has a responsibility to provide a range of services to its community and it may be considered by individual users of this service to be unethical to cut them. For example, local libraries are likely to be costly and demand for them may be decreasing but for those who use the service it is likely to be seen as a vital contribution to the community. C must carefully consider the impact of these reductions upon the community at large. C must also consider the impact of its decisions upon the wider public sector. Reducing leisure services could reduce the general level of health and wellbeing within its community which could then impact upon health service providers.

The ethical consideration for C is that local authority elected members must make a number of value judgments regarding non-essential services after consultation with the local population and service users. Ethically, the staff have a duty to facilitate consultation on non-statutory service cuts on behalf of the members so that the members can make an informed decision.

Therefore, C must consider the level of communication and involvement necessary. Forcing through widespread change is likely to be considered unethical and also is likely to result in a high degree of resistance. Therefore a policy of communication, consultation and involvement, both of staff and the wider community, is likely to result in more effective change which is considered to be ethically carried out. C must gauge local support or opposition to the planned cuts and must consult with all relevant stakeholders.

The local authority needs to listen to the local population and respond to its feedback on how and where cuts could be made to least affect the community which C serves.