Examiner’s Answers

Note: Some of the answers that follow 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/p3papers

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/P3PEGS

SECTION A

Answer to Question One

Rationale
This question is based on both the common pre-seen scenario and the unseen scenario. Part (a) deals with the benefits of mitigating staff health and safety risks by the appointment of a safety officer. Part (b) deals with the implications of restructuring senior management roles. Part (c) deals with the management of risks arising from operating in a foreign country.

Part (a) draws mainly on Section B of the syllabus (Risk and Internal Control). This part asks for an understanding of the risks to staff who are responsible for leading “adventure” holidays. Part (i) focusses on the attributes that would be required of a Safety Manager, whose role would be to deal with these risks. This requires a realistic evaluation of the resources that can be invested in dealing with those risks. The fact that only one person will be appointed means that the company has to decide upon the priorities for this position and set a realistic set of criteria, otherwise the post will either be ineffective or impossible to fill. Part (ii) asks for a discussion of the benefits that this appointment will bring, which requires consideration of the risks themselves and the advantages to the company of addressing them. Part (iii) asks for a discussion of the factors that should be taken into account when developing safety rules for leading groups on a cycling holiday.

Part (b) draws mainly on section A (Management and Control Systems). The company’s operations are presently structured round three distinct product groups. It has been proposed to change the structure so that managers will have responsibility for functions that feed into the creation of all three products. This requires an understanding of the motives and
motivations associated with corporate structure.

Part (c) draws mainly on section D (Management of Financial Risk). The entity proposes a major investment in a country with which it has had no prior dealings. The support of the local government will be crucial to the success of this investment and the question asks for an evaluation of the risks (i) and a discussion of the possible responses (ii).

Suggested Approach

Part (a)(i) asks for recommendations for the attributes that will be required of a safety officer for a specific role. The job is specialised and there may not be an existing pool of applicants with specific experience in this role. Candidates should consider the work that the safety officer will have to undertake and should then rank the areas where skill and experience will help. For example, a basic skill in the activities will be of some value, but it is more important that the Safety Manager should be aware of the risks created by leading groups of participants who are of a mixed ability. In other words, a professional cyclist may have relatively little concept of the risks associated with leading a group of amateurs who may have limited skill and fitness. Part (a)(ii) asks for a discussion of the benefits associated with this appointment. That requires a discussion of both the reduction of the risk of accident and the legitimisation of the company’s activities. The former is almost certainly more important than the latter. The company has a moral obligation to protect its staff and the safety officer will help the company to ensure that the risks are kept to the lowest possible level. There could be legal consequences in the event that the company is ever sued for negligence by an injured employee, although that threat is mitigated by the fact that an employee is unlikely to have the resources to mount a successful claim. Furthermore, any accident is likely to occur overseas and the question of jurisdiction will further complicate the employee’s problems. Part (a)(iii) requires a discussion of the factors that the safety officer should consider when writing about cycling holidays. That part of the question does not require candidates to be expert cyclists. It does require a certain amount of common sense concerning the risks associated with leading sporting activities in a foreign country, where factors such as climate and culture could affect the risks involved. The question asks for an intelligent discussion of those factors and so candidates are not required to offer specific solutions for dealing with, say, the risks of cycling long distances in a hot climate.

Part (b) asks candidates to consider the implications of restructuring the company. At present the Operations Director oversees three operating departments, each of which is responsible for a designated product group. That creates the possibility that there will be competition between the three senior managers for resources, to the detriment of the company. The proposal is that future operations be structured according to three functional areas associated with creating holidays: airlines, hotels and marketing. The expectation is that candidates will consider the possibility of the same potential for dysfunctional behaviour changing form rather than being eliminated altogether. There are further strategic implications of the proposal and those should be discussed as well.

Part (c) requires candidates to think about the problems associated with foreign direct investment. The company proposes to build a hotel in a country with which it has not had any prior dealings. The plans will create a great deal of environmental damage and so the host government may decide not to support the company in the event of a serious backlash from the protestors who are already active in the area. Part (c)(i) requires candidates to think about the risks arising from this investment. To an extent, those risks will also require an understanding of the implications of this investment for the government. Part (c)(ii) requires a discussion of the techniques that might be used to mitigate those risks. Candidates should be aware of some of the generic techniques that can be used to address the risks associated with dealing with host governments. Ideally, those generic techniques should be edited and structured in a manner that relates to the specific facts provided in the scenario.
(a) Firstly, the manager should have adequate knowledge of the sports involved so that s/he can evaluate the risks faced by the leaders. It would be ideal if the Safety Manager has experience of leading or teaching others because the leaders are not simply trekking, cycling or sailing, they are assisting and advising others and the involvement of unknown third parties will have an impact on the risks. It would be ideal if the Safety Manager was a former teacher or an experienced instructor. On balance, teaching, coaching or leadership credentials are more important than outright skill levels with the sports because a highly skilled cyclist or sailor may not necessarily appreciate the difficulties faced by those with less skill or experience.

The sailing activities are the most specialised and so the Safety Manager might be selected on the basis of a sailing background. It should be possible for a qualified sailing instructor to learn the issues associated with trekking and cycling.

It would be ideal if the Safety Manager came from V’s home country but had travelled extensively and understood the issues associated with climate and culture. That would give the Safety Manager a better appreciation of the problems associated with taking customer’s from V’s home country to the locations used for adventure holidays. The leaders are also more likely to listen to somebody who understands the issues associated with adapting from V’s home country to the local host country.

(ii) V is under a legal and moral responsibility to ensure the health and safety of its employees. If the adventure holiday leaders are put at risk then V could be sued for compensation. Furthermore, V may be forced to assist an employee who is injured while working. Hospital treatment and repatriation are likely to be very expensive. A competent Safety Manager will be able to identify potential threats to health and safety and to provide employees with guidance that will reduce the likelihood of injury. The fact that the risks have been assessed should also protect V from accusations of negligence in the event of any incident or injury.

The risks associated with leading activities are different from those associated with engaging as a participant. Leaders have the distraction arising from the need to supervise and monitor the activities of the customers. The leaders may also become complacent because of over-familiarity. Engagement with a Safety Manager may encourage greater care. The fact that the Safety Manager will be a permanent appointment will mean that the implementation of V’s procedures will be kept under constant review. It would be far easier for procedures to be overlooked in the event that, say, a consultant or an ad hoc management team wrote the procedures and left staff to implement them without further review.

(iii) The Safety Manager should evaluate road conditions. If the roads are different from those in SK then the leaders will be at greater risk in terms of their own safety, particularly when also keeping watch over customers. Driving standards vary between cultures and that will affect the safety issues associated with cycling generally and of leading a group of cyclists. Local drivers may be less skilled if driving licences are easier to obtain than in V’s home country. There could also be a greater tendency to drive quickly and/or recklessly. The physical condition of roads could also be an issue. The adventure leaders will be at greater risk if the roads are narrow or potholed.

The climate is also an issue for the leaders, who will be under greater pressure than the customers because of the need to stay in contact with both the fastest and the slowest cyclists in each group. Hot weather could lead to risks such as dehydration and sunstroke. Cycling in cold weather could create the risk of slippery roads. The Safety Manager will have to take to the road in order to study the climate because the physical nature of cycling will contribute to the effects of the weather in terms of the overall impact on the adventure leaders. It is also possible that the density of traffic may affect the
conditions on the roads. Heat emissions from passing vehicles may make the temperature on the roads several degrees higher than the ambient temperature noted in weather reports.

The quality of the bicycles and the standard of maintenance is also an issue. Adventure leaders will be placed at risk if their customers are stranded by mechanical breakdowns. Malfunctions could also cause serious crashes in a tight group of cyclists and the adventure leaders could be at risk of being injured. If the leaders are trained to maintain the bicycles then the standard of maintenance will be known and the leaders will be motivated to ensure that they are maintained correctly.

The availability of reliable communications is an important factor. Mobile phone signals may not be reliable outside of towns and so the leaders may not be able to summon assistance in the event of an emergency. It may be necessary for V to equip leaders with satellite telephones in some centres.

Finally, the Safety Manager should consider whether the work schedule allows for adequate rest. If leaders work for too many days in a row then they could become over-tired and their health could suffer. Fatigue could also make it more difficult to concentrate and that could lead to accidents.

(b) The proposed restructuring will change the responsibilities of the senior managers who report to the director of operations. In the process, it will change their motivation. The present arrangements are potentially inefficient and divisive. The three holiday managers are effectively competing for shares of the same resources and will not necessarily act in V’s best interests. For example, there will be limited space in the brochure and each manager will be keen to see his or her brand of holiday given the greatest prominence. The restructuring should mean that management attention will be focussed more on V’s profitability and there will be little or no incentive to push for sales of, say, prestige holidays at the expense of package.

The proposed restructuring of the company will create a management team that has its duties broken down into functional areas, without the same scope for internal competition. The new arrangements will concentrate staff expertise and experience on important tasks such as booking flights and liaising with airlines. That focus should help ensure that V’s staff have a better understanding of such complex tasks and that should enhance quality. It will also give airlines and other suppliers a more obvious point of contact within the company, which will lead to more efficient communication and also better customer relations.

Perhaps the new arrangements will lead to a loss of focus on V’s basic business model. Under the existing arrangements there are managers who are dedicated to creating and selling specific holiday products. That focus may have led to a certain amount of dysfunctional behaviour, but it also led to the creation of distinctive brands that were managed and promoted as effectively as possible. Perhaps the challenges of managing relationships with, say, hotel chains serving the Prestige Travel market differed from those associated with Package. In that sense, there could be a loss of specialisation.

The danger of dysfunctional behaviour will change, but it will not be eliminated altogether. Previously, senior managers would take care to maximise contribution from each type of holiday product. The different products were probably not competing with one another for revenues and so V benefitted from dedicated management teams ensuring that each was sold aggressively. It may be tempting for the new management team to enhance ratios such as gross margin by focussing on the holiday type that offers the greatest scope for contribution, thereby permitting overall profitability to decline.

(c) (i) Once V builds the hotel then any investment will be at risk. The minister could withdraw his support for the venture and that would render the investment worthless. By that stage, the investment will be a sunk cost, but the risk must still be taken into account at present
because the investment has not been committed. The most immediate threat to V in this regard is that the minister could have a political agenda, such as wishing to promote the interests of local companies, whose profitability could be threatened by multinationals such as V.

This will be the first investment of this type by V. The minister will be able to exploit that once the hotel has been built because V’s directors will wish to ensure that it is a success. This will be a very visible project that will catch the shareholders’ attention. The minister will be able to use that visibility as a lever to influence V’s board. It may lead to subtle pressures that undermine the profitability of the venture rather than its outright failure.

The minister will be under pressure from environmentalists because the proposed development is clearly unsustainable. The development will introduce large numbers of tourists and staff into an area with a fragile ecosystem. The island cannot sustain any inhabitants because of the lack of fresh water and the need to generate electricity locally. Transportation of tourists, supplies and fuel will leave a large carbon footprint. Pollution and sewage will be a further problem. This is precisely the type of development that is capable of attracting a disproportionate response from the environmental lobby and so the minister could sacrifice V’s development in order to promote the country’s environmental credentials.

(ii) One very effective way to protect V’s investment would be to enter into a more formal partnership with J. J has an established hotel on the island and is experienced in dealing with the minister and with the government generally. It will be far more difficult for the government to withdraw a licence or otherwise interfere with the operation of a business that is partly owned by an established employer and business owner. J may even be a national of the country, which would further strengthen his position relative to the government.

Ideally, V should structure the arrangement with J so that J builds the hotel at his own expense and V agrees to pay for the capacity, subject to the hotel being open for business. V will be able to generate at least as much income from his venture without having any of its own funds at any kind of direct risk.

V should borrow the funds required for this venture from a local bank, so that the minister of tourism will be risking the bank’s security if he threatens to withdraw the hotel licence.

V should consider a far more significant expansion. This country appears to be a new destination as far as V is concerned. It does not appear to be on the routes for any of the charter airlines that V works with. V could enter into arrangements with other hotels on the mainland, and so make use of the fact that the minister is keen to expand income from tourism. If V becomes a significant player in this market then it will be far more costly for the minister to interfere with the development on J’s island. The expectation would be that this expansion would be a profitable venture in itself and so it would not involve any direct cost to V.

V could pre-empt some of the threats by behaving in a socially responsible manner and reducing the environmental impact to the lowest realistic level. The company should also act as a caring and responsible employer and promote the fact that it is bringing wealth into the country.
SECTION B

Answer to Question Two

Rationale
Question 2 draws on section C (Audit and Audit of Control Systems). Part (a) deals with the detection of fraud by a middle-ranking manager. Part (b) deals with the decision by the entity to pay the fraudulent member of staff to leave quietly. Part (c) deals with the possibility that the qualified accountant who discovered the fraud has an ethical duty to report the fraud to the authorities.

Suggested Approach
Part (a) requires candidates to think about the information provided in the scenario. The question describes the evidence that is available to the entity. That evidence is persuasive, but it does not provide outright proof. Candidates are required to use their common sense to evaluate the problems that the entity would face if attempting to offer proof against the manager using the material that has been uncovered. This is a simple fraud, but it has been carefully designed and it will be difficult to prove anything unless any of the parties involved confesses.

Part (b) deals with the fairly common practice of asking fraudulent members of staff to resign. This is a practical response to a difficult situation. The entity cannot trust the manager to remain in place, but it also has very little real justification for sacking him. Obtaining his cooperation by paying him to leave seems like a rather unjust outcome, but at least it removes the problem. Candidates should focus on the simple economics of this scenario rather than wasting time and energy on expressing anger at the manager’s behaviour.

Part (c) asks candidates to consider the ethical response of the internal auditor to this dilemma. CIMA’s ethical guidance is a good place to start. Candidates should consider whether the auditor has any real reason to breach the duty of confidence owed to the entity. On balance, the circumstances can be evaluated as providing very little justification for disregarding the directors’ instruction to let matters rest.

(a) There is very little evidence against the manager and the law will almost certainly require the hospital to prove that the Canteen Manager was fraudulent. The material and the information that has been gathered by F is persuasive but most of it could simply be denied by the Canteen Manager.

The hospital can prove that the Canteen Manager’s purchases cost more than might have been charged by another supplier, but that is not in itself proof of fraud. The manager could claim to have been careless in permitting the supplier to overcharge the hospital, but could deny any fraudulent intent. The purchases clearly did take place because the food was received and sold through the canteen. The transactions were authorised by the manager, who was empowered to authorise new suppliers and to sign for purchases. All of the documentary evidence proves that the canteen purchases were made from an authorised supplier for the purpose stated in the bookkeeping records.

The only way to prove that the manager had defrauded the hospital would be to seek a formal statement from the supplier that there had been fraudulent collusion. The supplier is owner-managed and the owner is clearly implicated in the fraud. All the owner has to do is to claim that the sales actually occurred at the recorded prices. If the owner admits to participating in the fraud then s/he will be admitting to a criminal offence and will then be open to the threat of criminal charges. The hospital might also be able to reclaim the overstatement of the prices from the owner.
The only correspondence concerning the fraud is in an electronic format. By his own admission, the internal auditor has accessed the email account and so the manager could claim that the files and messages have been tampered with. There is no direct proof that the emails were sent to and from the Canteen Manager and the owner. Anybody could have created that email account and sent and received bogus emails describing a fraud. The manager could simply deny ever having sent or received those messages.

(b) It would be unacceptable for the Chief Executive to make this arrangement in order to protect the reputations of the hospital’s senior management. If the public becomes aware of the fraud then the fact that the senior management team had not detected it sooner could lead to criticism of the hospital’s governance arrangements.

The Chief Executive may have been acting in the best interests of the hospital. Under the circumstances, it would have been necessary to have suspended the manager from duty on full pay until the allegations could be properly investigated. It would almost certainly have been impossible for this investigation to reach a satisfactory conclusion and so the suspension would have been prolonged and expensive. Paying the manager to leave made it possible to restrict the cost of the settlement to the agreed sum.

The hospital would also have been unable to appoint a replacement Canteen Manager while the investigation was still in progress. The payment will leave the post vacant and so a new appointment can be made to this important role.

Staff may be demotivated if they discover that the control system had broken down in this way and that a major fraud had been committed. Paying the manager to leave quietly will enable the directors to maintain the impression that the control environment is functioning.

The payment will, of course, come from funds that had been intended to treat patients. Even if the payment is justified as the least expensive resolution of this problem, it is undesirable for hospital resources to be spent in this way.

(c) Qualified accountants are generally subject to ethical codes that are almost identical to CIMA’s Code of Ethics for Professional Accountants. That code applies within the company and to contact with third parties. Thus, F is subject to a formal duty to respect the confidence of the hospital and not divulge this arrangement to anybody else, either within the hospital or outside of it.

This duty of confidence does not necessarily apply in every case. F has a wider duty to the stakeholders involved and so society in general. F could breach this duty of confidence if doing so was in the public interest. F should consider that possibility, although it seems unlikely to be the case given the facts. The amounts stolen from the hospital are unlikely to be sufficiently large as to warrant breach of confidence. On the other hand, the fact that the manager will receive a positive reference could mean that he will be able to repeat the fraud, which could create some justification for F to report the matter to, say, the police.

F is obliged to act with integrity. It could be argued that F has already discharged his responsibility by reporting the suspected fraud to the head of internal audit, who has clearly reported the matter to senior management. It appears that the management team has reached a decision that is in the hospital’s best interests and so there is no real need for F to take any further action.
Answer to Question Three

Rationale
This question draws mainly on section E (Risk and Control in Information Systems). It deals with the increasingly commonplace tendency for employees to equip themselves with the latest IT equipment, despite the risks that this might create for their employers.

Suggested Approach
Part (a) requires candidates to consider the needs of an entity that is heavily dependent upon its information systems. Staff have taken to spending their own money on non-standard hardware and, presumably, software. That means that the entity has no real control over the devices that are used to create and update vital software files. There is a risk that data will be lost or rendered useless because it cannot be opened. There are also risks of viruses and other payloads being introduced into the system.

Part (b) asks candidates to think about a realistic response to the threats and opportunities created by developments in IT. Companies cannot afford to disregard new technology because they could lose competitive edge if they simply banned innovation. However, progress has to be managed and the risks dealt with at every stage.

(a) The most immediate risk is that these tablets are being connected to H's servers in order to both download files and upload edited and modified versions. H has no way to ensure that these devices are free of viruses and other malware and so the systems could be corrupted. The laptops are a known quantity and H can specify the security software that must be used and kept up to date.

The files that are given to delegates are also potentially open to infection. The delegates could open their own organisations up to a threat and H could be held liable. H's IT staff may not be able to support these devices. If a compatibility issue arises with either hardware or software then the staff will be unable to seek support from H and that could affect the smooth running of a presentation. There are several different platforms for tablet computers and so it would be difficult for H's staff to be current with all of them.

Tablets do not always run industry-standard software, but there are often simplified packages that claim to be able to edit these files. The creation or modification of a file using a “compatible” software suite may mean that it cannot be opened or that some of the formatting is lost. That could make H's presentations seem far less professional. Tablets and similar devices may be less robust than a business laptop and so the courses could be disrupted by machines breaking down or failing.

The software running on the tablets may not be licenced and H may be open to accusations of copyright theft if its staff are using these devices using unauthorised copies.

In the event that a trainer leaves the company it will not be as easy for H to request the return of its files because they will be on the trainer’s personal tablet.

There are very few upside risks, but this arrangement does mean that H's trainers will often appear to be at the forefront of technology. It also gives H the opportunity to experiment with new technology at very little direct cost to the company.

(b) The starting point should be to insist that staff use only the hardware and software that have been provided by the company. That will give H control over the platforms that are being used to develop and deliver courses.

H should have a designated evaluation group to evaluate new technology as it becomes available. That group should comprise both IT experts and trainers, so that the new
technology can be assessed from both a technical and a practical point of view. H needs
to ensure that it makes the best possible use of new technology as and when it becomes
available in a reliable and cost-effective product. H should avoid getting carried away by
the rush to adopt new technologies that are at the “bleeding edge” because early
adopters pay more and bear most of the risks.

New hardware and software should be evaluated in terms of a detailed checklist covering
both security and compatibility. H has to be certain that none of its materials will be at risk
of infection or corruption and that they will also be capable of being opened, edited,
stored and passed onto clients. Security should be evaluated by referring to third-party
reviews by security specialists because it is unlikely that H will have sufficient expertise in-
house to test the firewall and anti-virus systems on a new computer platform.

When new devices require a change in software, such as a switch to a cut-down version
of a package that can be run on a tablet, H should insist that the presentations are
reviewed slide-by-slide to ensure that they all open and have the required format. H
should consider insisting that the materials continue to be updated using industry-
standard packages and that the new hardware should be used to present courses using
copies of the updated files.

There should be a genuine business reason for making the change to new platforms,
otherwise H will simply be exposed to the risks arising from the adoption of new
technology for no better reason than trainers’ preferring to use the latest “toys”. That
would not prevent H from agreeing to use new hardware simply for the sake of impressing
clients because image is very important in this business.
Answer to Question Four

**Rationale**
Question 4 draws on section D (Management of Financial Risk). Part (a) deals with the VaR statistic. Part (b) deals with the effectiveness of an option strategy for hedging. Part (c) deals with the option pricing.

**Suggested Approach**
Part (a)(i) requires the calculation of the value at risk statistic. Part (a)(ii) requires the manipulation of the formula for VaR to carry out a simple probability calculation.

Part (b) requires candidates to think about the implications for buying a put option and selling a call when faced with the prospect of receiving a substantial payment of foreign currency. The logic amounts to accepting a curb on the upside risk in return for a contribution toward the cost of limiting the downside risk.

Part (c) is looking for a discussion of the issues associated with options pricing.

**(a)**

(i) The value of the receivable is E$10m.

The daily standard deviation = E$10m x 0.8% = E$80,000.

At 95% the daily value at risk = E$80,000 x 1.645 = E$131,600.

The 30 day 95% value at risk = E$131,600 x √30 = E$720,803.

(ii) The option will be exercised if the price falls below E$9m or rises above E$10.5m. A loss of E$1m (to take the price below E$9m) equates to a daily value at risk of E$1m / √30 = E$182,574.

For that loss to occur E$80,000 x Z = E$182,574, so Z = 2.28. When Z = 2.28, probability = 0.5 – 0.4887 = 0.0113.

A gain of E$0.5m equates to a daily value at risk of E$0.5m / √30 = E$91,287.

For that gain to occur E$80,000 x Z = E$91,287, so Z = 1.14. When Z = 1.14, probability = 0.5 – 0.3729 = 0.1271.

The overall probability of either option being exercised = 0.0113 + 0.1271 = 13.84%.

**(b)** M has hedged the receivable using a combination of two options.

The downside risk is limited to a potential loss of E$1m. If the value of the receivable declines to less than E$9m then M will exercise its put option and will sell the US$ to the counterparty.

The upside risk has also been limited to a potential gain of E$0.5m. In the event that the receivable is worth more than E$10.5m the counterparty will exercise the call option and will buy the US$ for the option price.

While it is not particularly desirable to limit the upside risk, M has effectively offset part of the cost of the put option by doing so. The put option will cost the company E$200,000 or 2% of the value of the receivable. Combining that with the sale of the call option will reduce the net cost of the hedge to only E$200,000 – 160,000 = E$40,000.
M will be taking the risk that Counterparty 1 will be in a position to honour its commitment in the event of a loss on the receivable. The options are both OTC arrangements and are not organised through a recognised exchange, so there are fewer safeguards concerning the solvency of the counterparties.

(c) The most immediate factor in setting a price would be the question of whether the options are in the money or out of the money. In this case, both options are out of the money and so neither will be exercised unless there is a fairly significant movement in the underlying currency.

The two factors that combine to create the remainder of the value is the volatility of the underlying currency and the time remaining until exercise. The more volatile the currency, the greater the possibility that there will be a movement big enough to make it viable to exercise the option. The longer the time remaining, the more chance of exercise.

It would also be worth considering any forecasts and the likelihood of a movement in a particular direction. If there is a strong reason to believe that the receivable will increase in value then the counterparty will have to charge less for the option in order to make it attractive.