

Professional Level – Essentials Module

# Business Analysis

Wednesday 16 June 2010

**Time allowed**

Reading and planning: 15 minutes

Writing: 3 hours

This paper is divided into two sections:

Section A – This ONE question is compulsory and MUST be attempted

Section B – TWO questions ONLY to be attempted

**Do NOT open this paper until instructed by the supervisor.**

**During reading and planning time only the question paper may be annotated. You must NOT write in your answer booklet until instructed by the supervisor.**

**This question paper must not be removed from the examination hall.**

The Association of Chartered Certified Accountants

Paper 3

**ACCA**

## **Section A – This ONE question is compulsory and MUST be attempted**

**The following information should be used when answering question 1.**

### **1 Introduction**

Arcadia is a country with great mineral wealth and a hard-working, well-educated population. It has recently enjoyed sustained economic growth generated by the expansion of its manufacturing industry. The population has grown as well and, as a result, agricultural output has increased to satisfy this population, with much previously marginal land converted to arable and pasture land. However, after 10 years of sustained economic growth the country, in 2009, began to experience economic problems. Gross Domestic Product (GDP) has declined for three successive quarters and there is increasing unemployment. Surveys have shown that wages are stagnant and retail sales are falling. There are also increasing problems with servicing both personal and business debt leading to business bankruptcy and homelessness.

The climate of the country is also changing, becoming drier and windier. Last year, for the first time, the government had to ration water supply to domestic homes.

#### **The formation of WET**

In 2002, the environmental campaigner Zohail Abbas published a book on the Wetlands of Arcadia. The Wetlands of Arcadia are areas of natural habitat made up of land that is saturated with moisture, such as a swamp, marsh or bog. Dr Abbas' book chronicled the systematic destruction of the wetlands due to population growth, increased economic development and climate change. Water had been progressively drained from the wetlands to provide land for farming and to provide water for the increasing population and industry of the country. Wetlands also provide an important habitat for wildlife. Dr Abbas showed that in the period from 1970 to 2000, there had been a dramatic decline in birds, mammals and fish dependent upon the wetland habitat. Some species had become extinct.

In 2003, Dr Abbas formed the WETland Trust (WET), with the aim of preserving, restoring and managing wetlands in Arcadia. Since its formation, the Trust has acquired the four remaining wetland sites left in the country. The Trust's work is funded through donations and membership fees. Donations are one-off contributions. Membership is through an annual subscription which gives members the right to visit the wetlands. Each wetland site is managed by volunteers who provide access and guidance to members. The wetlands are not currently open to the general public. Dr Abbas' work on the wetlands has brought him to the attention of the Arcadian public and he is now a popular television presenter. WET is also a strong brand, recognised by 85% of Arcadians in a recent green consumer survey.

#### **GiftHelp**

WET is a registered charity. Charities within Arcadia have to be registered with the Commission of Charities which regulates charities within the country. The number of charities has increased significantly in the last few years leading to widespread criticism from established charities, politicians and the public, who believe that many of these charities have been formed to exploit taxation advantages. Dr Abbas is a vociferous critic, particularly after the Commission of Charities gave permission for the establishment of a rival wetland charity (WWTFT) despite the fact that all wetlands in Arcadia are under WET's control. WWTFT promised to create new wetlands artificially in Arcadia. They have so far only raised \$90,000 of the \$151,000,000 required for a pilot site. Dr Abbas was part of a group that lobbied the government for the reform of the Commission of Charities, but the government has rejected their advice.

The government of Arcadia has recently changed the rules on charity taxation. Previously, once the charity's accounts had been audited, the government paid the charity a sum of 20% of the total value of donations and membership fees. This reflected the income tax the donor would have paid on the amount they had given to the charity. However, the government has now declared that this is unfair as not all donations or membership fees are from Arcadian taxpayers or from people in Arcadia who actually pay tax. Consequently, in the future, charities will have to prove that a donation or membership fee was from an Arcadian tax payer. Only donations or fees supported by this proof will receive the 20%, so called GiftHelp, refund. Research and evidence from other countries suggests that 30% of donors will not give the GiftHelp details required and so the charity will not be able to reclaim tax from these donors. An analysis of WET's income for 2008 is given in Figure 1 and an analysis of income for all charities is given in Figure 2. Research has also shown that 55% of members and 85% of donors also give money to other charities.

**Figure 1 – WET’s income sources; year 2008**

	Members	Donors
Arcadian Taxpayers	\$650,000	\$100,000
Arcadian Non-taxpayers	\$100,000	\$50,000
Non-Arcadian	\$50,000	\$50,000
Total	\$800,000	\$200,000

**Figure 2 – Income for all Arcadian charities; year 2008 (in \$millions)**

	Amount donated to charity
Health charities	775.0
Social Care charities	275.5
International charities	149.8
Environmental charities (including WET)	45.6

**WET 2003–2009**

WET was originally a vehicle for promoting the vision and ideology of Dr Abbas. Volunteers were recruited to manage and administer the wetland sites and the number of members gradually increased (see Figure 3). Many of these volunteers have become acknowledged experts in wetlands and their knowledge and experience is valued by members. However, as the charity expanded a number of issues emerged.

1. Administrative costs rose at a faster rate than subscriptions and donations. Administrative staff are all full-time paid employees of the charity. However, despite an increase in staff numbers, there is a substantial backlog of cleared applications in the Membership Department which have not yet been entered into the membership computer system. The membership computer system is one of the systems used to support administration. However, the functionality of this software is relatively restricted and cumbersome and there have been complaints about its accuracy. For example, members claim that renewal reminders are often sent out to people who have already paid and that members who should have received renewal invoices have never received them. As a result ‘we seem to be wasting money and losing members’.
2. Members have become increasingly frustrated by their limited access to the wetlands and many wish to participate more in determining the policies of the organisation. They feel that the wetland sites should also have better facilities, such as toilets and concealed positions for bird watching. There were increasing criticisms of Dr Abbas’ domineering style and cavalier disregard for the members. Membership is currently falling and very little money is spent on sales and marketing to arrest this fall.
3. Volunteers have also become disgruntled with Dr Abbas’ management style. They feel patronised and undervalued. The number of volunteers is declining (see Figure 3) which in itself is reducing the access of members to the wetlands. A recent decision not to pay travelling expenses to volunteers led to further resignations.

**Figure 3 – Membership and volunteer statistics WET 2002–2009**

	2002	2003	2004	2005	2006	2007	2008	2009
Members	12,000	14,000	15,000	20,000	22,000	25,000	23,000	20,000
Volunteers	30	35	35	45	50	52	50	40

At the 2009 Annual General Meeting (AGM) Dr Abbas stood down and announced the appointment of a new Chief Executive Officer (CEO). Dr Abbas admitted in an emotional resignation speech that he had not sufficiently taken into account the views of members, donors or volunteers. ‘It is a matter of deep regret that I spent more time focusing on wetlands rather than people’. He was made honorary president of WET in recognition of his work in establishing and expanding the charity.

The new CEO, Sheila Jenkins, wishes to pursue a more inclusive strategy, and immediately set about consulting the membership and voluntary staff about what they expected from WET. The two clearest messages that came from this consultation exercise were that:

- Members wanted much better access to wetlands and they were more interested in the wildlife that used the wetlands (particularly the birds) than the wetlands sites themselves. This was not a view shared by Dr Abbas who wanted the wetlands preserved for their own sake.

- Volunteers wished to be much more involved in the running of the organisation and wanted to be treated by management in a way that recognised their voluntary commitment.

### **System review**

Sheila Jenkins is particularly keen to improve the technology that supports WET. She has stated that the better acquisition and management of members, volunteers and donors is an important objective of WET. WET's current website is very rudimentary, but she sees 'e-mail and website technology as facilitating the acquisition, retention and satisfaction of our customers' needs. And by customers, I mean both prospective and existing members, volunteers and donors of WET.' She also wishes to gain increased revenue from each member and donor.

The current membership renewal process has come under instant review and it is shown in the swim lane diagram (flowchart) of Figure 4. A narrative to support this diagram is given below.

### **Membership renewal process**

One month before the date of membership renewal, the computer system (Membership System) sends a renewal invoice to a current (not lapsed) member giving subscription details and asking for payment. A copy of this invoice is sent to the Membership Department who file it away. Approximately 80% of members decide to renew and send their payment (either by providing credit card details (60%) or as a cheque (40%)) to WET. The Membership Department matches the payment with the renewal invoice copy. The invoice copy (stamped paid) is sent to Sales and Marketing who use it to produce a membership card and send this card together with a Guide to Sites booklet, to the member. The Membership Department passes the payment to the Finance Department.

Finance now submits payments to the bank. It currently takes the Finance Department an average of five days from the receipt of renewal to notifying the Membership Department of the cleared payment. Once cleared, Finance notifies the Membership Department by e-mail and they update the Membership System to record that the payment has been made. As mentioned before, there is a backlog in entering these details into the computer system.

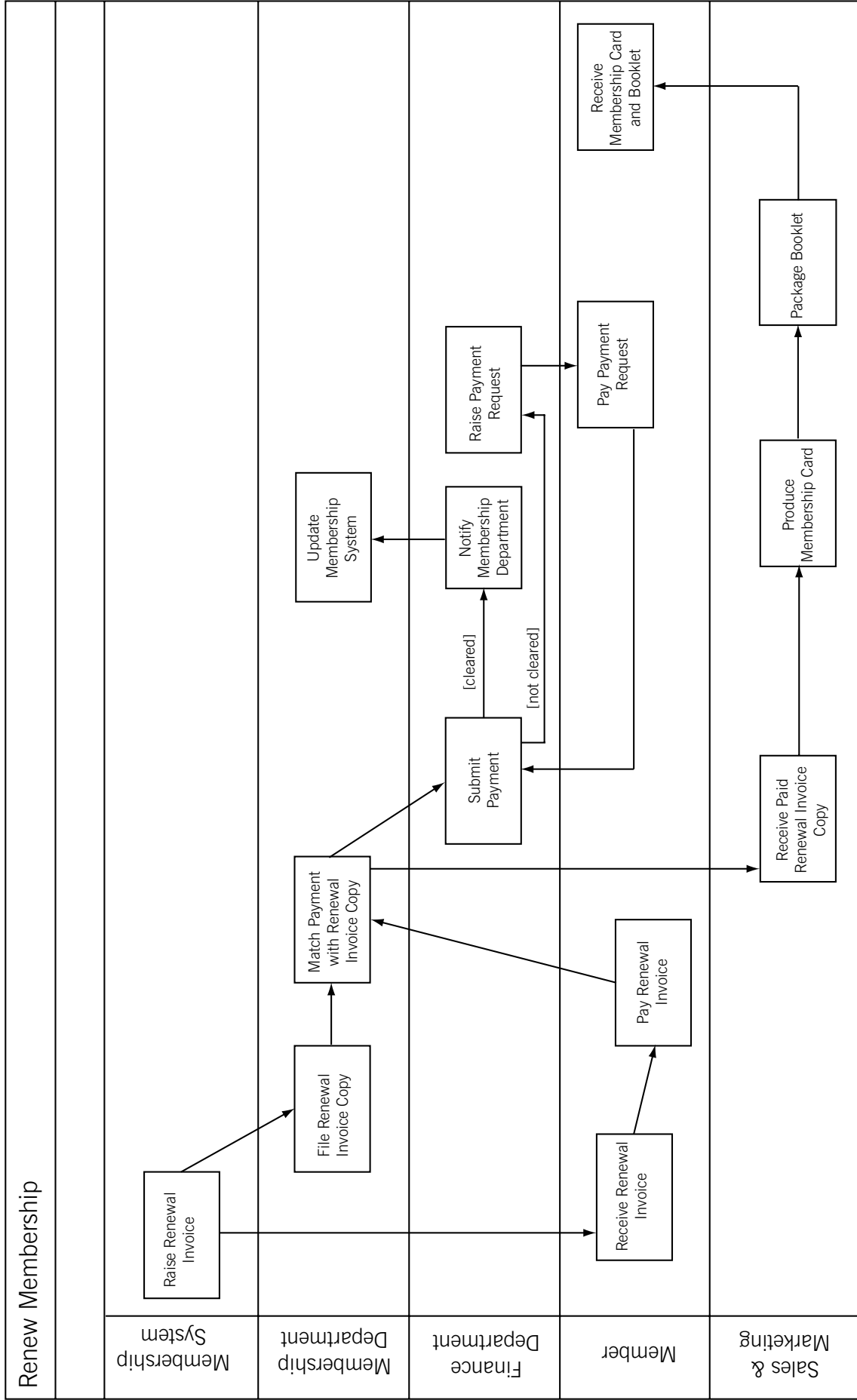
Some cheques do not clear, often because they are filled in incorrectly (for example, they are unsigned or wrongly dated). In these circumstances, Finance raises a payment request and sends it to the member. Once the member re-submits a replacement cheque, it again goes through the clearing process.

Credit card payments are cleared instantly, but again there may be problems with the details. For example, incorrect numbers and incorrect expiry dates will lead to the transaction not being authorised and so, in these circumstances, Finance again raises a payment request.

The members' response to payment requests is very low (about 5%). The finance manager has described this as scandalous and 'an unethical response from supposedly ethical people'.

Also, not shown on the diagram: One week before renewal, the Membership System produces a renewal reminder and sends it to the member. Some members pay as a result of this reminder. If payment is not received then the member details are recorded as 'lapsed'.

Figure 4 – Membership renewal process



**Required:**

- (a) The new CEO, Sheila Jenkins, recognises that she should understand the strategic position of WET before considering strategic options and changes. She wants a concise assessment of the strategic position; covering environment, strategic capability, stakeholder expectations and organisational mission.

**Undertake the assessment, required by Sheila Jenkins, of the strategic position of WET.** (21 marks)

**Professional marks will be awarded in part (a) for the scope, structure and tone of the answer.** (4 marks)

- (b) Problems with the current membership renewal process include:

- the low response to payment requests
- the despatch of renewal reminders for people who have already paid
- the failure to send renewal invoices to some members.

**Analyse faults in the current membership renewal process that cause the problems identified above. Suggest solutions that would remedy these faults.** (15 marks)

- (c) Sheila Jenkins sees customers as 'both prospective and existing members, volunteers and donors of WET'. She also wishes to gain increased revenue from each member and donor.

**Evaluate how email and website technology might facilitate the acquisition and retention of WET's customers and support WET's aim to gain increased revenues from members and donors.** (10 marks)

**(50 marks)**

## Section B – TWO questions ONLY to be attempted

- 2 Ambion is the third largest industrial country in the world. It is densely populated with a high standard of living. Joe Swift Transport (known as Swift) is the largest logistics company in Ambion, owning 1500 trucks. It is a private limited company with all shares held by the Swift family. It has significant haulage and storage contracts with retail and supermarket chains in Ambion. The logistics market-place is mature and extremely competitive and Swift has become market leader through a combination of economies of scale, cost efficiencies, innovative IT solutions and clever branding. However, the profitability of the sector is under increased pressure from a recently elected government that is committed to heavily taxing fuel and reducing expenditure on roads in favour of alternative forms of transport. It has also announced a number of taxes on vehicles which have high carbon emission levels as well as reducing the maximum working hours and increasing the national minimum wage for employees. The company is perceived as a good performer in its sector. The 2009 financial results reported a Return on Capital Employed of 18%, a gross profit margin of 17% and a net profit margin of 9·15%. The accounts also showed a current liquidity ratio of 1·55 and an acid test ratio of 1·15. The gearing ratio is currently 60% with an interest cover ratio of 8.

10 years ago the northern political bloc split up and nine new independent states were formed. One of these states was Ecuria. The people of Ecuria (known as Ecurians) traditionally have a strong work ethic and a passion for precision and promptness. Since the formation of the state, their hard work has been rewarded by strong economic growth, a higher standard of living and an increased demand for goods which were once perceived as unobtainable luxuries. Since the formation of the state, the government of Ecuria has pursued a policy of privatisation. It has also invested heavily in infrastructure, particularly the road transport system, required to support the increased economic activity in the country.

The state haulage operator (EVM) was sold off to two Ecurian investors who raised the finance to buy it from a foreign bank. The capital markets in Ecuria are still immature and the government has not wished to interfere with or bolster them. EVM now has 700 modern trucks and holds all the major logistics contracts in the country. It is praised for its prompt delivery of goods. Problems in raising finance have made it difficult for significant competitors to emerge. Most are family firms, each of which operates about 20 trucks making local deliveries within one of Ecuria's 20 regions.

These two investors now wish to realise their investment in EVM and have announced that it is for sale. In principle, Swift are keen to buy the company and are currently evaluating its possible acquisition. Swift's management perceive that their capabilities in logistics will greatly enhance the profitability of EVM. The financial results for EVM are shown in Figure 1. Swift has acquired a number of smaller Ambion companies in the last decade, but has no experience of acquiring foreign companies, or indeed, working in Ecuria.

Joe Swift is also contemplating a more radical change. He is becoming progressively disillusioned with Ambion. In a recent interview he said that 'trading here is becoming impossible. The government is more interested in over regulating enterprise than stimulating growth'. He is considering moving large parts of his logistics operation to another country and Ecuria is one of the possibilities he is considering.

Figure 1 – Extract from financial results: EVM 2009

Extract from the statement of financial position

	\$million
Assets	
<b>Non-current assets</b>	
Intangible assets	2,000
Property, plant, equipment	6,100
	<u>8,100</u>
<b>Current assets</b>	
Inventories	100
Trade receivables	900
Cash and cash equivalents	200
	<u>1,200</u>
	<u>9,300</u>
<b>Total assets</b>	
<b>Equity and liabilities</b>	
<b>Equity</b>	
Share capital	5,700
Retained earnings	50
	<u>5,750</u>
<b>Non-current liabilities</b>	
Long-term borrowings	2,500
<b>Current liabilities</b>	
Trade payables	1,000
Current tax payable	50
	<u>1,050</u>
<b>Total liabilities</b>	<u>3,550</u>
<b>Total equity and liabilities</b>	<u>9,300</u>

Extract from the statement of comprehensive income

	\$million
Revenue	20,000
Cost of sales	(16,000)
	<u>4,000</u>
Gross profit	4,000
Administrative expenses	(2,500)
Finance cost	(300)
	<u>1,200</u>
Profit before tax	1,200
Income tax expense	(50)
	<u>1,150</u>
Profit for the year	<u>1,150</u>



**Required:**

- (a) **Assess, using both financial and non-financial measures, the attractiveness, from Swift's perspective, of EVM as an acquisition target.** (15 marks)
- (b) Porter's Diamond can be used to explore the competitive advantage of nations and could be a useful model for Joe Swift to use in his analysis of countries that he might move his company to.

**Examine using Porter's Diamond (or an appropriate alternative model/framework) the factors which could influence Swift's decision to move a large part of its logistics business to Ecuria.** (10 marks)

**(25 marks)**

- 3 Ergo city authority administers environmental, social care, housing and cultural services to the city of Ergo. The city itself has many social problems and a recent report from the local government auditor criticised the Chief Executive Officer (CEO) for not spending enough time and money addressing the pressing housing problems of the city.

Since 1970 the authority has had its own internal Information Technology (IT) department. However, there has been increasing criticism of the cost and performance of this department. The CEO has commented that 'we seem to expand the department to cope with special demands (such as the millennium bug) but the department never seems to shrink back to its original size when the need has passed'. Some employees are lost through natural wastage, but there have never been any redundancies in IT and the labour laws of the nation, and strong trade unions within the authority, make it difficult to make staff redundant.

In the last few years there has been an on-going dispute between managers in the IT department and managers in the finance function. The dispute started due to claims about the falsification of expenses but has since escalated into a personal battle between the director of IT and the finance director. The CEO has had to intervene personally in this dispute and has spent many hours trying to reconcile the two sides. However, issues still remain and there is still tension between the managers of the two departments.

A recent internal human resources (HR) survey of the IT department found that, despite acknowledging that they received above average pay, employees were not very satisfied. The main complaints were about poor management, the ingratitude of user departments, ('we are always being told that we are overheads, and are not core to the business of the authority') and the absence of promotion opportunities within the department. The ingratitude of users is despite the IT department running a relatively flexible approach to fulfilling users' needs. There is no cross-charging for IT services provided and changes to user requirements are accommodated right up to the release of the software. The director of IT is also critical of the staffing constraints imposed on him. He has recently tried to recruit specialists in web services and 'cloud computing' without any success. He also says that 'there are probably other technologies that I have not even heard of that we should be exploring and exploiting'.

The CEO has been approached by a large established IT service company, ProTech, to form a new company ProTech-Public that combines the public sector IT expertise of the authority with the commercial and IT knowledge of ProTech. The joint company will be a private limited company, owned 51% by ProTech and 49% by the city authority. All existing employees in the IT department and the IT technology of the city authority will be transferred to ProTech who will then enter into a 10 year outsourcing arrangement with the city authority. The CEO is very keen on the idea and he sees many other authorities following this route.

The only exception to this transfer of resources concerns the business analysts who are currently in the IT department. They will be retained by the authority and located in a new business analysis department reporting directly to the CEO.

The CEO has suggested that the business analysts have the brief to 'deliver solutions that demonstrably offer benefits to the authority and to the people of the city, using information technology where appropriate'. They need to be 'outward looking and not constrained by current processes and technology'. They will also be responsible for liaising between users and the newly outsourced IT company and, for the first time, defining business cases with users.

In principle, the creation of the new company and the outsourcing deal has been agreed. One of the conditions of the contract, inserted by the finance director, is that the new company achieves CMMI level 5 within three years. The current IT department has been recently assessed as CMMI level 2. ProTech has recently been assessed at CMMI level 3.

**Required:**

- (a) **Evaluate the potential benefits to the city authority and its IT employees, of outsourcing IT to ProTech-Public.** (12 marks)

- (b) The role of the business analyst is currently being re-designed.

**Analyse what new or enhanced competencies the business analysts will require to undertake their proposed new role in the city authority.** (7 marks)

- (c) **Explain the principles of CMMI and the advantages to ProTech-Public of achieving CMMI level 5.** (6 marks)

**(25 marks)**

- 4 Judy Sodhi is in her first teaching year at the National College, a private college offering short courses in accounting, auditing and management. In her first year Judy has primarily taught the Certificate in Managerial Finance. This is a three-day short course which ends in an externally set examination, marked and invigilated by staff employed by the Institute of Managerial Finance (IMF). The IMF also defines the syllabus, the length of the course and accredits colleges to run the course. There are no pre-conditions for candidates who wish to attend the course. Last year Judy ran the course 20 times with an average of nine students on each running of the course. At the end of each course every student has to complete a post-course evaluation questionnaire. Judy does not see these questionnaires and has received no feedback about her performance.

As the college is a virtual organisation using serviced training rooms, Judy rarely sees her manager Blake Jones. However, he contacted her recently to suggest that they should conduct her first appraisal and a date and time was agreed. Blake explained that 'it would be just a general chat looking at how the year had gone. We need to do one to satisfy the college and the IMF'. The time of the appraisal was set for 3.00 pm, finishing at 5.00 pm.

The appraisal did start with a general discussion. Blake outlined the plans of the organisation and his own promotion hopes. Judy was surprised to see that Blake was not following any standard list of questions or noting down any of the answers she made. She told him that one of her main problems was the numeracy level of some of the candidates. She recognised that the course had no pre-conditions, 'but it does require some basic mathematical skills that some of our candidates just do not have'.

After listening to Judy for a while Blake produced a statistical summary of the feedback questionnaires from the courses she had run in the last year. He said that the organisation expected its lecturers to attain an acceptable result in all 10 questions given in the post-course questionnaire. An acceptable result 'is that 90% of all candidates said that they were 'satisfied or very satisfied' with key aspects of the course'. Judy had achieved this on seven of the questions but specifically failed on the following performance measures;

- Percentage of candidates who felt that the course was relevant to their current job – *only 65% of your candidates felt that the course was relevant to their current job.*
- Percentage of candidates who passed the examination – *only 88.88% of your candidates passed the examination.*
- Percentage of candidates who felt that the course pace was satisfactory – *only 75% of your candidates felt that the pace of the course was satisfactory.*

After expressing her surprise that she had not been given this information before, she immediately returned to the problem of numeracy skills. 'As I told you' she said 'some of these students lack the mathematical skills to pass. That's not my fault, it is yours – you should not have let them on the course in the first place. You are just filling the places to make money'.

After a heated discussion, Blake then turned to the 'last thing on my agenda'. He explained that it was only college policy to give pay increases to lecturers who had achieved 90% in all 10 questions, so there would be no increase for Judy next year. However, he also needed to discuss her workload for next year. He produced a spreadsheet and had just begun to discuss course planning and locations in great detail when his mobile phone rang. 'I am sorry, Judy, I have to collect the children from school – I must go. I will write down your planned course assignments and e-mail them to you. I think that was a very useful discussion. Overall we are very happy with you. See you at the end-of-year party, and of course at next year's appraisal.' He left at 4.30 pm.

**Required:**

- (a) **Based on Judy's appraisal, evaluate the appropriateness of the appraisal process and performance measures at the National College, from both an employee and an organisational perspective.** (15 marks)
- (b) **Explain the concept and purpose of competency frameworks for organisations, assessing their potential use at the National College and the Institute of Managerial Finance.** (10 marks)

**(25 marks)**

**End of Question Paper**