

THE PUBLIC ACCOUNTANTS EXAMINATIONS BOARD

A Committee of the Council of ICPAU

CPA(U) EXAMINATIONS

LEVEL FOUR

INTEGRATION OF KNOWLEDGE – PAPER 16

COMPREHENSIVE CASE STUDY

MORNING SESSION MATERIAL

THURSDAY, 10 DECEMBER 2009

INSTRUCTIONS TO CANDIDATES:

1. Time allowed: **6 hours**.
9.00 a.m. – 11.30 a.m. (2 hours 30 minutes): Planning.
11.30 a.m. – 12.30 noon. (1 hour): Break.
12.30 noon – 4.00 p.m. (3 hours 30 minutes): Writing.
2. The following pages contain case study material.
3. The case study questions are contained in a separate paper marked Afternoon Session Material.
4. The completed answers and any working papers, clearly labelled working papers must be handed in at the end of the afternoon session. Where working papers form part of your answer, ensure that they are appropriately cross-referenced.
5. It is in your interest that you hand in all written material prepared during the examination.
6. Tables are provided on page 17 - 18.
7. Please read further instructions on the answer book.

UGALINES GROUP OF COMPANIES

Introduction to the Group

The Ugalines Group of Companies (The Group) is an indigenous group of companies with business interests in fish processing, property management and real estate, radio broadcasting and automobiles. Founded in the early 1990s¹ the group has enjoyed reasonable success with its annual turnover in excess of Shs 1.8 billion¹ for the year 2008. The group has a total headcount of more than 180, of which 95% are Ugandans.

History

The Group's history is an amazing tale of entrepreneurial genius! No wonder the proprietor, Mr. Tega-Akamasu is a common point of reference by politicians and businesspeople of all calibres. He often features at a broad range of seminars and workshops, most of the time as a keynote speaker. Mr. Tega, as he is commonly known to his peers was born at a village landing site in Masaka district. He went to school but dropped out in Primary Three. He then spent the better part of his childhood venturing in the waters of Lake Victoria as a fisherman. Together with his father, they would spend nights on the lake casting nets, and then returning to the lake the following morning to harvest their catch. After a rest of about two hours, they would then get set to carry the fish to the trading centre at the nearby Lambu landing site. It is at Lambu that the fish would be sold to agents of major fish packers. Little did he know then, that the skills he was learning from his father would later help him to become one of the most sought-after local business speakers!

Fast forward to the current times, Mr. Tega is now a leading entrepreneur with several business interests including Ugalines Properties Limited managed by his eldest son; Ugalines Motors Limited managed by his first wife; Ugalines Radio Limited managed by his second wife and Ugalines Marine Limited managed by Mr. Tega himself. He is also the group's managing director/board chairman.

The biggest company in the group is Ugalines Marine Limited, a fish processing and exporting firm located in Jinja. The company's main market is the East African region as well as the European Union (EU). All fish is harvested from Lake Victoria, including the tilapia, Nile perch and mukene. Ugalines Marine Limited mainly exports tilapia and Nile perch though the latter is getting more and more scarce by the day.

Governance

By international standards, Ugalines is a relatively simple group of companies. The board of directors comprises of four positions, with one vacant position yet

¹ Source: Draft Financial Statements 2008 of Ugalines Group

to be filled. The members of the board are Mr. Tega , Mr. Musa Musoke, Tega's eldest son (also managing director at Ugalines Properties Limited), and a non-executive director Mr. Dennis Mugambe who is a university lecturer and an old friend of Mr. Tega. Mr. Mugambe is new on the board, having been appointed less than six months ago. His appointment was an attempt by the board chairman to bring some professionalism to the board after attending a small and medium-size enterprises (SME) seminar organised by the Capital Markets Authority early this year. It was at this seminar that Mr. Tega came to realise how much professional management could add to his business empire.

Prior to Mr. Mugambe's appointment, the board comprised of four members: Mr. Tega, his two wives and his eldest son. A few days after the Capital Markets Authority seminar, Mr. Tega's wives were asked to resign from the group's board for constant bickering which was considered destabilising and unhealthy for the group's business interests.

Mr. Dennis Mugambe comes to the board with a lot of experience in business training, having risen through the ranks at Makerere University from the position of teaching assistant to his present position of senior lecturer in the Faculty of Management over a 17-year period. He recently completed a Doctorate of Philosophy (PhD), and is currently serving in an acting capacity as Dean of the Faculty of Management. Mr. Mugambe has a few publications to his name, mainly in management and corporate governance.

Mr. Dennis Mugambe's Experience at the Board

Shortly after his appointment to the group board, Mr. Mugambe interacted with Mr. Tega and other senior management to understand the strategic operations of the company in preparation for his role as board member. In his first board meeting at the group earlier this year, Mr. Mugambe was shocked to learn that there were no formal minutes taken for board meetings. He was equally surprised to learn that neither the group nor the individual companies had a formal marketing strategy in place. He was heard lamenting after attending his first board meeting at the group that, "It is our responsibility as the board to give strategic guidance to the group, otherwise we have no business being called board members. We, however, cannot provide that strategic guidance if we cannot even take formal minutes. I have done some research on corporate governance and I find that we have a long way to go if we are to make a meaningful contribution to the group"

"Given what we have seen happening in the developed world, we as the board cannot afford to take a back seat. Besides, the collapse of big multinational companies should make us even more concerned. We also need clarification as to what our roles, duties and responsibilities are, say in form of a board charter. Such a document should also spell out what information we should be receiving

from the various group companies, and how often it should be provided”, he was quoted as saying.

Mr. Musa Musoke has heard and reflected over the comments made by the new director, and he is of a different opinion. He thinks that most of what the new guy was talking about was not applicable to a group like Ugalines, and that it was mere textbook theory typical of university lecturers. He particularly felt that there was no point in wasting valuable time documenting issues which did not generate any extra revenue, neither was there need to meet more often. “We are a small team of four people, who can easily pass on information to each other” he said to himself.

Other Management Issues

There are also increasing concerns within Ugalines creditors over the composition of top management. Asked recently whether management at the Group is not a family affair, Mr. Tega said that “... the best professionally run company in our group is Ugalines Properties Limited.” Referring to his eldest son, he added “... that boy Musa is such a hard working young man. In only three years, he has managed to grow the balance sheet by one and half times, and the company has extended financial help to other companies in the group! So I have no worries over there. The biggest challenge I see is at the radio and at Ugalines Motors Limited. Something is not working out right, but believe me, I will sort things out sooner rather than later ...” All this was in response to a question from a university student recently, when Mr. Tega presented a paper to students of entrepreneurship at Amolotor Martyrs’ University.

The matter of family dominance in the group had also been previously discussed at one of the impromptu management meetings. Unknown to him that day, a leading business paper (Kamunye Business Daily) had carried an article on corporate governance in indigenous companies in Uganda. In the newspaper feature by the Kamunye Business Daily, the group was prominently quoted among the leading local companies that were facing major corporate governance challenges. The paper had picked particular interest in a story that two managing directors in the group (Ugalines Motors Limited and Ugalines Radio Limited) had had a physical confrontation, with the latter accused of attempting to harm the former with sulphuric acid. The article noted that all this stemmed from one managing director wanting to takeover management at Ugalines Motors Limited, where apparently there is “more money”.

There were other issues sighted by the paper, including disagreements with the group’s external auditors, accusations of bribery, abetting illegal fishing methods, tax evasion and extensive employment of relatives. *“Of course Ugalines is a private company that can employ anyone they wish to employ.”* concluded the newspaper article with ironical reference to the employment of relatives.

During the afternoon of the same day, Mr. Tega read the full article in the Kamunye Business Daily. He had been briefed by his personal assistant much earlier in the day before rushing to a students' workshop for his planned presentation. The more he reflected about the issues, the more he felt like taking some drastic actions. Unfortunately, he was not sure of what to do before the other. As he often did when annoyed, he wrote an angry memo to all staff and also summoned a management meeting to be held two days later. A copy of the memo is attached as Appendix 1. He also attached a copy of the draft minutes of the previous management meeting (Appendix 2) which had been held two weeks earlier.

Proposed Expansion at Ugalines Marine Limited

A proposal to open another fish processing plant had been presented by the finance manager at the recent management meeting. The project was planned to increase production of fish for export in order to take advantage of the growing demand for fish in the EU, as well as mitigate the threat of the reducing levels of harvest in Lake Victoria (see minute 2 of Appendix 2). However, no agreement was reached at the meeting given the scanty information presented by the finance manager.

Asked by his colleagues about the group's agreed required return on investment, the finance manager had shrugged his shoulders and said " ... We have faced difficult times as a group. The business environment has been a bit hostile to us for the past few years. But anyway, we should be happy with an internal rate of return (IRR) of 15%. Our biggest undoing in the past projects has been the inadequacy of working capital. To sort that out this time round, we plan to inject Shs 180 million in working capital in addition to the Shs 330 million in capital costs! We have also sought some professional advice regarding the feasibility of the project. The consultants who prepared the technical feasibility report were paid Shs 15 million, which I feel must be recovered by taking on this project".

The proposal was met with mixed reactions stemming from experience with past investment decisions. The group had previously been involved in a number of ventures that proved disastrous. These included a failed attempt to run a TV station, and an attempt to go into the hospitality business by adding a 90-room hotel to the group. Both projects collapsed within two years into their implementation, and were sold off to minimize losses.

Seeking Professional Advice

At 9:30 pm last night as you were idly watching TV at home contemplating your next professional move, your phone rang and guess who it was, Mr. Tega, a childhood friend of yours!

"Congratulations upon completing your CPA course", he began. You exchanged pleasantries and even reminded him of those old days when he dropped out of school, and how you used to tease him about it.

"I always knew I would make it in life even without going higher in school," he joked. "Can you imagine I have a presentation to make or a workshop to attend almost every fortnight!" he added.

After a lengthy chat, Mr. Tega informs you that the reason he called was not just to congratulate you upon qualifying as an accountant, but also to tap into your professional skills. He said, "I need your professional advice as a CPA regarding a number of issues. Business has been fairly okay at Ugalines Group, but I was concerned with the recent newspaper publications quoting issues at the group. There may be some truth in some of the issues raised, but I think it is going beyond acceptable limits, and something must be done. I am also bothered by the performance of two companies in the group; Ugalines Radio Limited and Ugalines Motors Limited". He revealed to you that, "... at the radio for example, my wife has failed to streamline operations. Expenses are just rising without corresponding increase in income and debts are also rising. Whereas we agreed that credit terms be revised, some debts are almost one year in arrears!"

"If it is fine with you, I can send a driver straight away to bring to you the draft minutes of the most recent management committee meeting as well as a list of key issues (see Appendix 4) on which I need your input. I have prepared the list in a hurry so there may be other issues that you may wish to consider. I am sure you will highlight these as well, if any. Let me also look around for any other information I can find, and have it sent to you at the earliest opportunity. I know it is short notice, but you might as well be my saviour. I have a crucial management meeting in two days, and I would love to have your views before then. Don't worry about the fees, I have dealt with professional accountants before and I know their fees. Of course as an old friend and village mate, I am sure we can not fail to agree. Besides, this is not an audit assignment and so it cannot be that costly!" he concluded.

Appendix 1

UGALINES MARINE LIMITED

Memorandum

To: All Staff:

From: Group Chairman

Subject: Article in the Kamunye Business Daily.

Following the recent media reports regarding the operations of the group, as well as other management issues we have partly tackled in the past, I have been forced to send this memo out to all staff.

Even though we have no communication policy, it is unacceptable for staff to leak company information to the press. We would rather address matters internally than go out to the media. This is unacceptable and the offenders are going to be reprimanded.

It has come to my knowledge that the said information was sent by email to the press. Consequently, from today there will be no more internet facilities for all staff in the group, save for managers. Office communication will have to be by memo and the telephone intercom. The telephone exchange will also henceforth be fitted with a recorder and monitored. To ease office communication, we are going to bring on board twelve more office attendants, three for each company.

I have also instructed the IT manager to retrieve for my perusal all email messages sent in the last two months. The culprit must be found and disciplinary action taken against him/her. All staff should be warned that nobody is allowed to speak on behalf of the company.

Finally, I wish to invite all managers to an urgent management meeting. We shall meet in two days time, on Wednesday at 9:00 am. The minutes will be circulated to the relevant persons shortly.

Best regards;

Tega-Akamasu

Group Chairman

Appendix 2

Draft Minutes of the Last Ugalines Group Management Committee Meeting.

[illegible]

Minute	Noted/Discussed/Agreed	Action by								
(b) Un disclosed related party transactions	Noted The auditors noted several examples of related party transactions that had not been disclosed. These included;									
	<table><tr><th>Observation</th><th>Auditors' Comments</th></tr><tr><td>A personal loan of Shs 23 million to the managing director, Ugalines Radio limited.</td><td><i>This loan to the proprietor's wife is 40% of the total receivables for Ugalines Radio Limited. No mention of it exists in the financial statements.</i></td></tr><tr><td>Use of part of a Ugalines Properties Limited's building for offices of an engineering company in which Musa is a major shareholder.</td><td><i>The Managing Director Ugalines Properties Limited is a shareholder in an engineering company that occupies space on one of the properties owned by Ugalines Properties Limited. This company pays rent which is the equivalent of 30% of what others pay for similar premises.</i></td></tr><tr><td>Ugalines Radio Limited offers free advertising to the sister companies.</td><td><i>No mention of this in the financial statements.</i></td></tr></table>	Observation	Auditors' Comments	A personal loan of Shs 23 million to the managing director, Ugalines Radio limited.	<i>This loan to the proprietor's wife is 40% of the total receivables for Ugalines Radio Limited. No mention of it exists in the financial statements.</i>	Use of part of a Ugalines Properties Limited's building for offices of an engineering company in which Musa is a major shareholder.	<i>The Managing Director Ugalines Properties Limited is a shareholder in an engineering company that occupies space on one of the properties owned by Ugalines Properties Limited. This company pays rent which is the equivalent of 30% of what others pay for similar premises.</i>	Ugalines Radio Limited offers free advertising to the sister companies.	<i>No mention of this in the financial statements.</i>	
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	Use of part of a Ugalines Properties Limited's building for offices of an engineering company in which Musa is a major shareholder.	<i>The Managing Director Ugalines Properties Limited is a shareholder in an engineering company that occupies space on one of the properties owned by Ugalines Properties Limited. This company pays rent which is the equivalent of 30% of what others pay for similar premises.</i>								
Ugalines Radio Limited offers free advertising to the sister companies.	<i>No mention of this in the financial statements.</i>									
Discussed and agreed The personal loan taken was to buy a vehicle for the managing director. This vehicle is used in executing the company's duties, even though it is registered in personal names. There is no need to put this unnecessary detail in the financial statements. On the rental properties, the said company was given a discount since it holds most of the construction contracts at Ugalines Properties <i>Limited</i> . On advertising, all companies are part of the group. Free advertising is not an issue since it ultimately benefits the group as a whole.										

Minute	Noted/Discussed/Agreed	Action by
<p>(c) Treatment of the newly installed production plant at Ugalines Marine Limited</p>	<p>Noted</p> <p>Management disagreed with the auditors on the treatment of the newly installed production line in the financial statements. The auditors believe it is a finance lease, and therefore should be recognised as an asset, with a corresponding obligation appearing in the statement of financial position. According to the auditors, given the materiality of the amount involved (Shs 220 million), a qualification is likely unless the treatment is changed to conform to International Financial Reporting Standard 17: Leases.</p> <p>Discussed</p> <p>According to the finance manager at Ugalines Marine Limited, <i>"this is mere off-balance sheet finance since the company does not even have legal ownership of the machinery. A disclosure will be incorporated in the financial statements showing the outstanding balance payable."</i> He added <i>"Recognition of the assets would even attract depreciation which will understate our net earnings. We are the most profitable company in the group and that will not change."</i></p> <p>Agreed</p> <p>That the finance manager consults further and comes up with a final position.</p>	<p>Finance Manager</p>

Minute	Noted/Discussed/Agreed	Action by
<p>Minute 2</p> <p>Proposal to Open a new fish Processing Plant</p>	<p>Noted</p> <p>The finance manager Ugalines Marine Limited presented the following proposal.</p> <p><i>"Ladies and gentlemen, as agreed early this year and owing to the increasing threat arising from the reduction of fish levels in lake Victoria, Ugalines Marine Limited is considering expanding the operations of the company to open up another fish processing facility on lake Kyoga. We feel that given the challenges the group has faced in the recent past, this time the decision should be made after involving all major stakeholders. I therefore wish to present to you the "Artistic Impressions" of our proposal in line with the existing capital budgeting process of the group. Currently, capital budgeting is a two step process involving identification of lucrative projects and immediate implementation with the approval of the group's chairman. The board of directors later on ratifies the chairman's decision."</i></p> <p>The Project</p> <p><i>The major capital requirements are the procurement of production machinery and equipment including a cold store room, skinning equipment, chopping equipment and packing equipment, trucks and the factory premises.</i></p> <p><i>Regardless of how the project is financed, annual production is expected at 24 tonnes with each tonne going for approximately Shs 7. million, rising by 3% per annum over the 10 year life of the project. Thereafter the factory will be disposed of at 40% of the initial cost, and the working capital realized in full.</i></p> <p><i>Fixed costs will be incurred at Shs 50 million per annum, while variable costs are expected to be incurred at 40% of the revenue.</i></p> <p><i>"Regarding finances, ladies and gentlemen, we propose that the money could be raised by acquiring a long-term loan from the Tweekembe Development Bank (TDB). I have already had preliminary consultations with the bank and they confirmed on telephone that if we qualify for the facility, we shall pay a fixed annual interest rate of 13%.</i></p> <p><i>The second option is to finance the project through a finance lease arrangement where about SHS 40 million would be paid at the end of each year, for a period of ten years."</i></p>	

Minute	Noted/Discussed/Agreed	Action by
	<p>Discussed</p> <p>"Given the current global developments, it's also important that we consider risk in making this decision. How risky is the project?" inquired Mr. Musa the managing director of Ugalines Properties Limited. <i>"We should only commit resources to projects that yield a minimum of 15%. Are we sure that we shall earn a minimum of 15 %?"</i> The question was met with stark silence. <i>"I would rather suggest that the funds are mobilized and given to us for more investment in property. At Ugalines Properties Limited, we have proven beyond doubt that we can generate returns in excess of 20%!,"</i> he concluded.</p> <p>Agreed</p> <p>That the finance manager improves on his proposal by supporting it with additional information, both qualitative and quantitative. This should be ready by 12 noon in time for the next meeting.</p>	Finance Manager
<p>Minute 3</p> <p>Letter from Lake Victoria Fisheries Organisation (LVFO)</p>	<p>Noted</p> <p>It was noted that the regional fisheries body, Lake Victoria Fisheries Organisation (LVFO) had written to the managing director, Ugalines Marinex Limited about the reports that the company was promoting the use of illegal fishing methods.</p> <p>Quoting from a recent newspaper, the regulator noted that <i>the future of the industry was in a balance following an unprecedented decline in the fish population in the lake²</i>. It was therefore going to take action against all fish dealers who in fact were or were seen to be promoting the use of illegal fishing methods.</p> <p>Discussed and agreed</p> <p>The meeting resolved to support the LVFO, and also tasked the marketing managers to come up with proposals on how the group can support the efforts of the fisheries body.</p>	Marketing Managers
A.O.B.	There being no other business, the meeting was closed.	

² Monitor Newspaper, Business Power 2nd June 2009.

Appendix 3**Extracts from the Group Financial Statements****Ugalines Marine Limited****Draft Statement of Comprehensive Income for the Year Ended 31****December 2008**

	2008	2007
	Shs '000'	Shs '000'
Revenue	719,788	1,062,471
Cost of sales	<u>(454,377)</u>	<u>(846,983)</u>
Gross profit	265,411	215,488
Operating expenses:		
Production costs	180,179	140,616
Selling and distribution costs	120,504	98,517
Staff costs	61,414	76,169
Total operating expenses	<u>(362,097)</u>	<u>(315,302)</u>
Loss from operations	(96,686)	(99,814)
Net financing costs	<u>(53,189)</u>	<u>(70,123)</u>
Loss before taxation	<u>(149,875)</u>	<u>(169,937)</u>

Appendix 3 (continued)**Ugalines Marine Limited****Draft Statement of Financial Position as at 31 December 2008**

		2008		2007
	Shs '000'	Shs '000'	Shs '000'	Shs '000'
Assets:				
Non-current assets:				
Property, plant and equipment		540,730		570,659
Deferred tax asset		<u>120,010</u>		<u>85,620</u>
		660,740		656,279
Current assets:				
Inventory	188,023		325,418	
Trade Receivables (Debtors)	140,596		101,136	
Cash and bank balances	<u>75,602</u>	<u>404,221</u>	<u>225,497</u>	<u>652,051</u>
Total assets		<u>1,064,961</u>		<u>1,308,330</u>
Equity and liabilities				
Capital and reserves				
Share capital				
Ordinary share capital	50,000		50,000	
Accumulated profits	<u>225,125</u>		<u>375,000</u>	
		275,125		425,000
Non-current liabilities:				
Loans maturing after one year		380,774		460,000
Current liabilities:				
Bank overdraft	90,563		221,713	
Creditors and accruals	85,000		45,201	
Amounts due to related companies	<u>233,499</u>	<u>409,062</u>	<u>156,416</u>	<u>423,330</u>
Total equity and liabilities		<u>1,064,961</u>		<u>1,308,330</u>

Appendix 3 (continued)**Other Select Financial Indicators for the Ugalines Group (Based on Draft Financial Statements for the Year Ended 2008)**

	Ugalines Radio Limited		Ugalines Properties Limited		Ugalines Motors Ltd	
	2008	2007	2008	2007	2008	2007
Gross profit margin	11%	20%	35%	22%	18%	21%
Net profit margin	8%	12%	16%	15%	13%	10%
ROE	1%	3%	10%	8%	2%	4%
Expenses to income	39%	23%	22%	21%	30%	26%
ROCE	0.5%	0.8%	5%	4%	1.5%	2%
Debtor days	210	120	40	30	60	50
Inventory days	N/A	N/A	180	270	220	193
Creditor days	60	75	60	35	38	22
Number of employees*	35	19	28	15	33	25
Current ratio	0.8	2.2	1	4	2.1	2.8
Interest cover	1	1.8	3	1.6	1.4	1.8
Debt: equity	3:1**	2:1	1:1	1.8:1	2:1.4	2:1.8

* Are mainly commission agents, and radio presenters in the case of Ugalines Radio Limited.

** Half the debt is from inter company borrowing.

Appendix 4

LIST OF ISSUES RAISED BY MR. TEGA

1. The companies' internal matters appearing in the press
2. The employment of relatives in the group.
3. My wives fighting over the management of one of my companies.
4. Auditors raising non-value adding issues.

Appendix 5

Table 1: PVIF- Present Value of Shs 1 Due at the End of n Periods

Period	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	18%	20%
1	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.847	0.833
2	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756	0.743	0.718	0.694
3	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658	0.641	0.609	0.579
4	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572	0.552	0.516	0.482
5	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497	0.476	0.437	0.402
6	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432	0.410	0.370	0.335
7	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376	0.354	0.314	0.279
8	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327	0.305	0.266	0.233
9	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.284	0.263	0.225	0.194
10	0.558	0.508	0.463	0.422	0.386	0.352	0.322	0.295	0.270	0.247	0.227	0.191	0.162
11	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215	0.195	0.162	0.135
12	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187	0.168	0.137	0.112
13	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163	0.145	0.116	0.093
14	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141	0.125	0.099	0.078
15	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123	0.108	0.084	0.065

TABLE 2: PVAF - Present Value of an Annuity of Shs 1 per Period for n Periods

Period	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	18%	20%
1	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870	0.862	0.847	0.833
2	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626	1.605	1.566	1.528
3	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283	2.246	2.174	2.106
4	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855	2.798	2.690	2.589
5	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352	3.274	3.127	2.991
6	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784	3.685	3.498	3.326
7	5.582	5.389	5.206	5.033	4.868	4.712	4.564	4.423	4.288	4.160	4.039	3.812	3.605
8	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487	4.344	4.078	3.837
9	6.802	6.515	6.247	5.995	5.759	5.537	5.328	5.132	4.946	4.772	4.607	4.303	4.031
10	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019	4.833	4.494	4.192
11	7.887	7.499	7.139	6.805	6.495	6.207	5.938	5.687	5.453	5.234	5.029	4.656	4.327
12	8.384	7.943	7.536	7.161	6.814	6.492	6.194	5.918	5.660	5.421	5.197	4.793	4.439
13	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583	5.342	4.910	4.533
14	9.295	8.745	8.244	7.786	7.367	6.982	6.628	6.302	6.002	5.724	5.468	5.008	4.611
15	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.847	5.575	5.092	4.675