SECRETARIAT ADDRESS
Institute of Chartered Accountants, Ghana
Okponglo, East Legon
P. O. Box GP 4268, Accra
Tel: +233(0)544336701-2; +233(0)277801422-4
Email: info@icagh.com
<table>
<thead>
<tr>
<th>CONTENT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 ICAG Organises Public Lecture on Income Tax Act 896, 2015</td>
<td>5</td>
</tr>
<tr>
<td>1.2 AWAG Holds IFWA Conference in Accra</td>
<td>5</td>
</tr>
<tr>
<td>1.3 ICAG President Advocates for the Establishment of Charity Commission</td>
<td>5</td>
</tr>
<tr>
<td>1.4 ICAG Organises Health Walk as Part of Accountants' Week Celebration</td>
<td>6</td>
</tr>
<tr>
<td>1.5 ICAG Holds 2016 Accountants' Conference</td>
<td>7</td>
</tr>
<tr>
<td>1.6 ICAG Gives to Weija Leprosarium</td>
<td>7</td>
</tr>
<tr>
<td>2.0 Consolidation of Simple Group</td>
<td>8</td>
</tr>
<tr>
<td>3.0 Overview of IFRS 9</td>
<td>19</td>
</tr>
<tr>
<td>4.0 The Key Issues Determining Offshoring Success in the Future</td>
<td>30</td>
</tr>
<tr>
<td>5.0 Past Examination Questions</td>
<td>40</td>
</tr>
</tbody>
</table>
ICAG NEWS BIT BITS

1.1 ICAG ORGANISES PUBLIC LECTURE ON INCOME TAX 2015, ACT 896

The Institute of Chartered Accountants, Ghana has organised a public lecture on the new Income Tax Act 2015, Act 896 to sensitise its members and the general public about the new income tax law and more particularly about changes and new requirements which are not in the existing income tax act, Act 592. The event under the theme “Income Tax Act 2015, Act 896: What has changed?” which took place on the 22nd March 2016 at the Movenpick Ambassador Hotel in Accra was very well attended and was chaired by Mrs. Angela Peasah, the Immediate Past President of ICAG Council.

Delivering his address, Mr. Edward A. Gyanbrah, Deputy Commissioner in charge of Policy & Planning of Ghana Revenue Authority (GRA), touched on the overall objective of the new tax law, the necessity of consolidating all the income tax laws which were hitherto scattered in various laws into one document, and some of the changes to the old tax laws as well as the new issues that have been added to the new tax law. The lecture was well delivered and the points well articulated to the admiration of everyone present.

The discussants, Mr. Emmanuel Asiedu of KPMG, and Mr. Abdalla Ali-Nakyga, a legal and tax consultant of Ali-Nakyga and Associates took the participants through some of the key issues and concerns in the new tax law, areas that the tax authorities have to look at again and some of the possible implementation challenges that may crop up.

1.2 AWAG HOLDS IFWA CONFERENCE IN ACCRA

The Association of Women Accountants Ghana (AWAG) has played host to the International Federation of Women Accountants (IFWA) in Accra from the 30th March to 2nd April 2016. The conference which was under the auspices of women accountants was held at the Labadi Beach Hotel on the theme “Building stronger institutions to mitigate corruption; development from the bottom up: The role of the Professional Woman”

The four day event was attended by well over 500 women accountants from mainly Nigeria, Ghana, Benin, Sierra Leone, Kenya, the Gambia, and Zimbabwe which constitute members of IFWA, as well as the IFAC’s Chief Operating Officer, Mrs. Atta Prinsloo.

The highlights of events for the conference included conference presentations, IFWA Nite, dinner dance, and Accra City tour. Topics discussed included 'Understanding the factors that lead to corruption and the impact on developing countries'; 'The role of political governance in the anti-corruption agenda'; 'Strengthening civil society and the media to mitigate corruption'; and 'Powerless to powerful: Practice of development from the bottom up'.

1.3 ICAG PRESIDENT ADVOCATES FOR THE ESTABLISHMENT OF CHARITY COMMISSION

The President of ICAG, Professor Kwame Boasiako Omane-Antwi has called for the establishment of a charity commission which would ensure that churches in Ghana pay taxes for the development of the country.
The commission he said, would also be responsible for regulating activities of the churches, while ensuring that accounts are prepared and audited annually. He bemoaned the activities of some pastors who have turned their churches into business entities. He said some men of God have turned their churches into houses of merchandise, selling all kinds of spiritual materials at exorbitant prices targeted at the vulnerable in the society particularly women. Professor Omane-Antwi believes that it is time sanity was brought to bear in these practices as is done in some advanced countries.

Speaking at the 26th graduation and admission ceremony of the ICAG in Accra on the 23rd of April 2016, Professor Omane-Antwi said the Charity Commission should be given the mandate to ensure that human rights abuses were curtailed in churches “by seeing to it that culprits of such abuses are duly prosecuted”.

The ceremony witnessed the graduation of 394 students who successfully completed the professional accounting programme last year, as well as the admission of 364 qualified professional accountants into membership. Thirty one students who had completed the Accounting Technician Scheme of West Africa (ATSWA) programme also graduated.

He urged accountants to avoid chasing wealth in the discharge of their duties and not to compromise on professionalism and integrity.

The Minister of Education which was the guest of honour advised the graduands to add value to the knowledge acquired from the institute in order to be relevant in the accounting profession. She urged the graduands to abide by the ethics of their profession by stressing that this will endear clients or customers to you because they can vouch for your devotion to duty and willingness to ensure they are satisfied with the services you render.

The Dean of the University of Ghana Business School, Professor Joshua Abor, called for partnership and networking amongst businessmen and businesswomen in the country in order to make greater exploits.

1.4. ICAG ORGANISES HEALTH WALK AS PART OF ACCOUNTANTS' WEEK CELEBRATION

The President of ICAG, Professor Omane-Antwi has stated that financial discipline is key to any successful economy. And as such policy planners, including financial experts must be able to appreciate a country's expenditure and ask critical questions on what went wrong and find solutions to them.

These remarks were made at the health walk to herald the accountants' week celebration which took place at the Aviation Social Centre in Accra. Participants in ICAG-branded t-shirts, made up of members, staff, and students started the walk around 7.20am from the Aviation Social Centre in Accra through the K, A. Busia Roundabout near 37 Military Hospital, the Ako Adjei Interchange, the Danquah Circle, through the Akufo-Addo Roundabout towards the Ghana International School (GIS), and back to the Aviation Social Centre. The participants later went through a rigorous aerobics to burn out calories.

Delivering his speech, the President commended the Minister of Finance, Mr. Seth Terkper, for the implementation of the Financial Management Law (FML) to check government expenditure. Professor Omane-Antwi announced that ICAG as a professional body, have established a public financial advocacy platform where we speak to salient issues on the economy, aside members of ICAG who are in critical positions in government who play their roles to that effect, stressing that every country needs a robust financial discipline of its expenditure.
He stressed that what we need to do as a country is cost containment, where we do not have to allow cost to overrun and you do not overspend to be in deficit that will cripple the economy. The theme for the celebration is the “emerging developments in the financial industry”. The President said, the celebration was aimed at discussing challenges in the financial sector and also finding alternative solutions to them.

The Vice-President of ICAG, Mr. Christian Sottie, underscored the need for accountants to exhibit transparency in their work for peace to prevail. He asserted that when there is transparency and accountability in the system, the system will be safe. Accountants must always ensure that the public understand figures they communicate to them. Present at the walk were Mrs. Angela Peasah, and Mr. Christian Sottie.

1.5 ICAG HOLDS 2016 ACCOUNTANTS' CONFERENCE

The President of ICAG, Professor K. B. Omane-Antwi, has stressed that consumer protection was critical to the foundation of the country's financial systems hence the need to protect them from unscrupulous financial firms. The President made the call during his inaugural speech to open the 2016 Accountants’ Conference at Movenpick Hotel in Accra which took a critical look at the dynamics at play in the financial services industry. The conference was held under the theme “Emerging Developments in the Financial Services Industry in Ghana”.

According to Professor Omane-Antwi, protecting the customer would give the public the confidence that the financial markets are fair and enables policy makers and regulators to maintain stability in regulation which in turn promotes growth, efficiency, and innovation. The President stressed that he would wish to see legislative, regulatory, and administrative reforms to promote transparency, simplicity, fairness, accountability and access in the market for consumer financial products that enhance economic development and well-being.

The President further indicated that Ghana's financial sector has evolved over the years and that it was time important legislative frameworks were developed to protect the consumer from the myriad of financial institutions operating in the country. He mentioned that the developments in the financial sector has resulted in challenges with many customers losing their investments due to bad faith from some microfinance institutions; whilst others have become disenfranchised with traditional banking system due to high interest rates.

The President emphasised that we need to improve the quality of regulation, knowing very well that the quality of regulation and supervision is positively correlated with the level of economic developments; and talking about regulation and supervision, we should not lose sight of the protection needed to accord consumers.

Professor Omane-Antwi said the reforms and protection sought could only work in a peaceful and stable country where citizens would go about their daily business activities without fear or favour. He told the conference that it should be our clarion call to urge all Ghanaians in our workplaces, neighbourhoods, and wherever we find ourselves, to maintain an atmosphere of peace as we discuss political issues. He further stressed the Institutes readiness to assist the Electoral Commission in the upcoming presidential and parliamentary elections in the compilation of results as well as serving as returning officers.

1.6 ICAG GIVES TO WEIJA LEPROSARIUM

The Institute of Chartered Accountants, Ghana has donated assorted items worth Five Thousand Ghana Cedis (GHC 5,000.00) to inmates of the Weija Leprosarium in Accra. The items presented included bags of rice, sugar, maize, millet, cooking oils, tubers of yam, boxes of tomato paste and mackerel, cartons of milk, detergents, and toiletries. A cheque for Five Thousand Ghana Cedis (GHC 5,000.00) was presented to support the upkeep of lepers in the country.
Presenting the items at a colourful ceremony at the Weija Leprosarium, the Vice President of ICAG, Mr. Christian Sottie, said the gesture formed part of its corporate social responsibility activities to mark this year's Accountants' Week. Mr. Sottie stressed that every year as part of Accountants' Week celebration, the Institute selects a less-privileged group in the country to extend their support, and this year, the Weija Leprosarium was chosen. He mentioned that the accountancy profession is a social work and reiterated the Institute's commitment to continue to support the less-privileged and vulnerable groups in the country.

Mr. Sottie urged the inmates not to look down on themselves but always remember that the over 4,000 ICAG members were with them and ready to support them.

Receiving the items, Aunty Gladys Adobea, Senior Prefect at Weija Leprosarium expressed appreciation to ICAG and all their benefactors for their support to them. Rev. Fr. Campbell, Chairman of the Lepers Aid Committee, noted that inadequate funds was a major challenge and appealed to corporate organisations to help them. He appealed to the public not to stigmatise the lepers and urged all families of the cured lepers to accept them back home.

2. CONSOLIDATION OF SIMPLE GROUP

By Kingsley Opoku Appiah., PhD, KNUST Business School and Joseph Arthur, MBA Finance, KNUST

1.0 INTRODUCTION
Hello and welcome to the first part of the series on Consolidation of Group Accounts. In this first part, we will consider basics in the preparation of simple consolidated financial statements. Consolidated financial statements are prepared based on the principles contained in the following standards:

a. IAS 27, Consolidated and Separate Financial Statements
b. IAS 28, Investments in Associates
c. IFRS 3, Business Combinations (Revised)
d. IFRS 10, Consolidated Financial Statements
e. IFRS 11, Joint Arrangements
f. IFRS 12, Disclosure of Interests in Other Entities

This article focuses on some of the main principles of consolidated financial statements that a candidate must be able to understand and gives examples of how they may be tested. It does not attempt to cover every technical aspect of consolidation, but to give candidates the tools they need to prepare for the style and level of testing, they can expect to see in most group questions in Paper 3.1. Here, we are going to illustrate consolidated financial statement by working through a past exam question updated to incorporate the new ideas developing around group accounting. Specifically, we have taken a real group accounting question from the Nov 2013 Paper 3.1 ICAG Exams and included recent issues raised by IFRS 10 Consolidated Financial Statements. The original question was called Adidome Ltd and Akatsi Ltd, but we will hereby call the companies, Pokua and Nyarko. The discussion will follow a question and answer (Q&A) format. The curious student is known as Joseph Arthur (JA) while the tutor is Kingsley Opoku Appiah (KO).
2.0 GROUP STRUCTURE
KO: Welcome to my office.
JA: Thanks for the warm reception. I love the aesthetic view of your office. I am finding some difficulties understanding group accounting principles. At the moment, I have some ten questions I will like responses to them.
KO: I am all ears. However, I will attempt to answer each of your questions following certain steps.
JA: How is a parent-subsidiary relationship identified?
KO: Your question is most aptly answerable using Step 1.

Step 1: Identification of Group Structure
IAS 27 defines consolidated financial statements as 'the financial statements of a group presented as those of a single economic entity.' A group is made up of a parent and one or more subsidiaries.

Extract (1a) from Nov 2013 Paper 3.1
<table>
<thead>
<tr>
<th>Pokua</th>
<th>Nyarko</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated Capital</td>
<td>GH¢120,000</td>
</tr>
</tbody>
</table>

Extract (1b) from Nov 2013 Paper 3.1
The following information is relevant:
“On 1 January 2010, Pokua Ltd. acquired 48,000 of the equity shares in Nyarko Ltd. for GH¢84,000 cash when the balance on the income surplus of Nyarko Ltd. was GH¢8,000 whilst the balance on the capital surplus account was GH¢13,000.”
The stated capitals of Pokua Ltd. and Nyarko Ltd are made up of 120,000 and 60,000 issued ordinary shares respectively. The shares were issued at GH¢1.00 each.
Of the 60,000 shares in issue for Nyarko Ltd, Pokua Ltd acquired 48,000. This acquisition gives the group 80% control indicated by number of shares acquired in the investee firm divided by the total number of shares in the investee (48,000 / 60,000 X 100). The NCI has the residual interest of 20%.

The above extract shows how a parent company has gained control over a subsidiary. At Paper 3.1 level, it is assumed that control exists if the parent company has more than 50% of the ordinary (equity) shares – i.e. giving them more than 50% of the voting power.
However, there are examples where a holding of less than 50% of the ordinary shares but control can be established. This may be because the parent has:
 i. the power over more than 50% of the voting rights by virtue of agreement with other investors
 ii. the power to govern the financial and operating policies of the entity under statute or an agreement
 iii. the power to appoint or remove the majority of the members of the board of directors, or
 iv. the power to cast the majority of the votes at meetings of the board of directors

In step number 1, it is important to identify two important date:
 i. Date of acquisition. This is defined in IFRS3 (revised), “Business combinations”, as the day that the parent achieves control, where the parent of the group is the ultimate parent. It is the date from which a subsidiary is consolidated – i.e., when the subsidiary's net assets, goodwill and NCIs are recognised. From the above extract, the date of acquisition is January 1, 2010.
ii. Date of the statement of financial position. This is the date on which the consolidated financial statements are being prepared. From the above extract, the date of the statement of financial position is December 31, 2012.

NOTE: 2years post acquisition

JA: That is very insightful. My next question is why intra-group transactions and balances cancelled?
KO: I will use Step 2 to answer your question.

3.0 INTRA GROUP TRANSACTIONS AND BALANCES
K.O: The basic underpinning the cancellation of intra group transaction is Substance over form. Here, this principle stipulates that transactions and other events should be accounted for and presented in accordance with their substance and economic reality and not merely their legal form.
JA: My next question is how are intra-group transactions and balances cancelled?
KO: Step 2 provides a solution to this question.

Step 2: Cancel all Intra-Group Transactions and Balances
Intra-group balances should be eliminated, as the consolidated accounts need to show the group as a single economic entity—in other words, the group position with the outside world. Usually, the intra-group transactions span from the acquisition investment made by the parent in the subsidiary to the sales of goods between them. Below, we discuss the common intra-group transactions.

1. Investment in subsidiary's equity shares. The investment in the subsidiary represents all the investments made by the Parent in the subsidiary's equity shares. The investment can be in the form of cash, share exchange, debt instruments, or a combination of the above. The consolidation treatment involves a simple process of cancellation. The cancellation procedure involves the passing of the following entries in The Journal:
   Debit Cost of Control
   Credit Investment in subsidiary' equity shares

Now let us consider the following extract from the November 2013, Paper 3.1
Extract (2a) from the Statement of Financial Position as at 31/12/12

<table>
<thead>
<tr>
<th></th>
<th>Pokua Ltd</th>
<th>Nyarko Ltd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current Assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, Plant &amp; Equipment</td>
<td>80,000</td>
<td>58,200</td>
</tr>
<tr>
<td>Investment</td>
<td>84,000</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>164,000</td>
<td>58,200</td>
</tr>
</tbody>
</table>
“On 1 January 2010, Pokua Ltd. acquired 48,000 of the equity shares in Nyarko Ltd. for GH¢84,000 cash”

2. **Current accounts**: these accounts need to be eliminated from the financials of both companies.

Extract (2b)

<table>
<thead>
<tr>
<th>Pokua</th>
<th>Nyarko</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current assets:</strong></td>
<td></td>
</tr>
<tr>
<td>Current account: Pokua Ltd</td>
<td>GH¢3,200</td>
</tr>
<tr>
<td>Current liabilities</td>
<td></td>
</tr>
<tr>
<td>Current account: Nyarko Ltd</td>
<td>GH¢2,700</td>
</tr>
</tbody>
</table>

Extract (2c)

- **Additional information**
  
  A cheque for GH¢500 from Pokua Ltd. to Nyarko Ltd., sent before 31 December, 2012, was not received by the latter company until January 2013.

Solution:

The current accounts above represent balances on the intra-group transactions between Pokua Ltd and Nyarko Ltd. Since they are group members, these balances must be eliminated. To eliminate the balances in the consolidated statement of financial position, the current account balances are not reported. However, take a careful look at the amounts involved. The current account balances differ by GH¢500 (3,200 – 2,700). This difference might be due to inventory in transit or cash-in-transit. Extract 2c (additional information) clarifies this matter by stating that, the difference represents cash-in-transit. This is recorded as an addition to the cash balance in the consolidated statement of financial position.

**The journal entries are:**

<table>
<thead>
<tr>
<th>Debit (GH¢)</th>
<th>Credit (GH¢)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,700</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
</tr>
<tr>
<td>3,200</td>
<td></td>
</tr>
</tbody>
</table>

**Being intra group payables & receivables cancelled**

<table>
<thead>
<tr>
<th>Debit (GH¢)</th>
<th>Credit (GH¢)</th>
</tr>
</thead>
<tbody>
<tr>
<td>84,000</td>
<td></td>
</tr>
</tbody>
</table>

**Being intra group investment cancelled**
4.0 PROVISION FOR UNREALISED PROFIT

JA: How do I adjust for provision of unrealised profit?
KO: Step 3: Adjust For Unrealised Profits

Unrealised profit arises when profits are made on intra-group trading and the related inventories have not subsequently been sold to customers outside the group. The identity of the seller is of paramount importance in a situation where the parent company does not have absolute control (100%) of the subsidiary. This is because, a sale made by the parent is treated distinctly from a similar sale made by the subsidiary.

a. If the parent is the seller of the unsold stock of the subsidiary, the treatment is as follows:
   Debit Consolidated Reserves XXX
   Credit Inventory XXX
   With the amount of unrealised profit

b. If the subsidiary is the seller, then the unrealised profit must be split proportionately between the Parent and the Non-controlling interest. The treatment is as follows:
   Debit Consolidated Reserves with Parent's share of the unrealised profit XXX
   Debit NCI with its share of the unrealised profit XXX
   Credit Inventory XXX

The following illustration demonstrates this in the context of the consolidated statement of financial position.

Extract (3) from Nov 2013 Paper 3.1

“During the year, Nyarko Ltd. sold goods to Pokua Ltd. at a mark-up of 25%. As at the end of the year, the inventories of Pokua Ltd. included GH¢4,000 of goods from Nyarko Ltd.”

Solution

The amount of unrealised profit can be computed as follows: \[
\frac{25}{125} \times 4,000 = \text{GH¢800}
\]

This amount is to be deducted from combined inventories in the consolidated statement of financial position, and also deducted from the income surplus of Nyarko Ltd. the following are the journal entries.

<table>
<thead>
<tr>
<th></th>
<th>Debit (GH¢)</th>
<th>Credit (GH¢)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPTION 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income Surplus of Nyarko Ltd</td>
<td>800</td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td></td>
<td>800</td>
</tr>
<tr>
<td><strong>OPTION 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consolidated Reserves –group share</td>
<td>80%*800</td>
<td>640</td>
</tr>
<tr>
<td>NCI</td>
<td>20%*800</td>
<td>160</td>
</tr>
<tr>
<td>Inventories</td>
<td></td>
<td>800</td>
</tr>
<tr>
<td><strong>Being unrealised profit eliminated</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5.0 FAIR VALUE ADJUSTMENTS
JA: How do I adjust for fair values of assets?
KO: Step 4: Adjust For Fair Values of Assets
According to IFRS 3 (Revised), during acquisition, the investee's assets ought to be revalued to their fair values to reflect the fair values.

Extract (4) from November, 2013; Paper 3.1
“On the date of acquisition, one item of plant of Nyarko with a book value of GH¢4,000 had a fair value of GH¢6,000. The plant had a remaining economic life of four years. The fair valuation had not been reflected in the separate statement of financial position of Nyarko Ltd.”

Solution:
The amount of fair value is GH¢6,000
The carrying amount is GH¢4,000
The fair value adjustment amounts to GH¢2,000

In consolidation, the amount of GH¢2,000 is to be added to PPE in the Consolidated Statement of Financial Position. The same amount is to be added to net assets on the date of acquisition for purposes of computing goodwill. Further, fair value adjustment is added to the computation of NCI. Finally, compute the depreciation on the fair value adjustment amount (taking into account the number of years post acquisition).

<table>
<thead>
<tr>
<th>Workings</th>
<th>Debit (GH¢)</th>
<th>Credit (GH¢)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant &amp; equipment</td>
<td></td>
<td>2,000</td>
</tr>
<tr>
<td>Revaluation Reserves</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2,000</td>
</tr>
</tbody>
</table>

DEPRECIATION ADJUSTMENTS:

OPTION 1
| Income Surplus of Nyarko Ltd | 2,000/4*2 | 1,000 |
| Property, plant & equipment  |             | 1,000 |

OPTION 2
| Consolidated Reserves –group share | 80%*1,000 | 800 |
| NCI                               | 20%*1,000 | 200 |
| Property, plant & equipment       |             | 1,000 |

Being adjustments for fair value depreciation.

6.0 PRE-ACQUISITION RESERVES
JA: Why and how should I split the equity and reserves of the subsidiary into pre, post and statement of financial position (SFP)?

KO: Step 5: Split Reserves and Stated Capital of Subsidiary into Pre, Post-Acquisition and SFP Periods.
All amounts existing before acquisition belong to the pre-acquisition timeline, while all amounts arising after acquisition belong to the post-acquisition timeline.
The SFP timeline reports on the sum of the amounts of the pre and post-acquisition timelines. Let us consider the following extracts.

Extract (5a) of SFP as at 31/12/12

Nyarko Ltd

<table>
<thead>
<tr>
<th>Equity Funds</th>
<th>Pre-Acquisition</th>
<th>Post-Acquisition</th>
<th>Balance Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stated Capital</td>
<td>60,000</td>
<td>0</td>
<td>60,000</td>
</tr>
<tr>
<td>Income Surplus</td>
<td>16,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital Surplus</td>
<td>13,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Equity Funds</td>
<td>89,000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Extract (5b)

1. On 1 January 2010, Pokua Ltd. acquired 48,000 of the equity shares in Nyarko Ltd. for GH¢84,000 cash when the balance on the income surplus of Nyarko Ltd. was GH¢8,000 whilst the balance on the capital surplus account was GH¢13,000.

2. On the date of acquisition, one item of plant of Nyarko with a book value of GH¢4,000 had a fair value of GH¢6,000. The plant had a remaining economic life of four years. The fair valuation had not been reflected in the separate statement of financial position of Nyarko Ltd.

3. During the year, Nyarko Ltd. sold goods to Pokua Ltd. at a mark-up of 25%. As at the end of the year, the inventories of Pokua Ltd. included GH¢4,000 of goods from Nyarko Ltd.

Solution

Split Reserves and Stated Capital of Subsidiary into pre, post-acquisition and SFP periods

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-Acquisition</th>
<th>Post-Acquisition</th>
<th>Balance Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>GH¢</td>
<td>GH¢</td>
<td>GH¢</td>
<td></td>
</tr>
<tr>
<td>Stated capital</td>
<td>60,000</td>
<td>0</td>
<td>60,000</td>
</tr>
<tr>
<td>Income surplus</td>
<td>8,000</td>
<td>8,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Capital surplus</td>
<td>13,000</td>
<td>0</td>
<td>13,000</td>
</tr>
<tr>
<td>Revaluation surplus</td>
<td>2,000</td>
<td>0</td>
<td>2,000</td>
</tr>
<tr>
<td>Provision for unrealised profit</td>
<td>(800)</td>
<td>(800)</td>
<td></td>
</tr>
<tr>
<td>Depreciation</td>
<td>(1,000)</td>
<td>(1,000)</td>
<td></td>
</tr>
<tr>
<td>Impairment</td>
<td>(2,200)</td>
<td>(2,200)</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>83,000</strong></td>
<td><strong>4,000</strong></td>
<td><strong>87,000</strong></td>
</tr>
</tbody>
</table>

Comment on Step 5:

a. The total of the pre is required for Goodwill calculation in step 6.

b. The total of the post is required for consolidated reserves calculation in step 8.

c. Concerning NCI:
   i. The total of the post is required for NCI’s calculation, if NCI is valued at fair value on the date of acquisition.
   ii. The total of the statement of financial position is required for NCI’s calculation, if NCI is valued at its partial share on the date of acquisition.
7.0 GOODWILL

JA: How is Goodwill arising on consolidation calculated?
KO: Step 6: Calculation of Goodwill

Goodwill can be computed using one of two methods:
- full approach
- partial approach

Using the Full Approach, Goodwill is computed as follows:

\[
\begin{align*}
\text{(1) Fair value of consideration transferred} & \quad X \\
\text{(2) Plus: Fair value of non-controlling interest} & \quad X \\
\text{(3) Less: Fair value of net assets at acquisition} & \quad X \\
\text{Goodwill at acquisition} & \quad X \\
\text{Less impairment of Goodwill} & \quad X \\
\text{Consolidated SFP} & \quad X \\
\end{align*}
\]

Under the Partial Approach, Goodwill is computed as such:

<table>
<thead>
<tr>
<th>Item</th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of consideration transferred</td>
<td>XXX</td>
</tr>
<tr>
<td>Less Group share of net assets at acquisition (Step 5)</td>
<td>(XXX)</td>
</tr>
<tr>
<td>Goodwill</td>
<td>XXX</td>
</tr>
<tr>
<td>Less impairment</td>
<td>XXX</td>
</tr>
<tr>
<td>Consolidated SFP</td>
<td>XXX</td>
</tr>
</tbody>
</table>

Extract 6

1. On 1 January 2010, Pokua Ltd. acquired 48,000 of the equity shares in Nyarko Ltd. for GH¢84,000 cash when the balance on the income surplus of Nyarko Ltd. was GH¢8,000 whilst the balance on the capital surplus account was GH¢13,000. The stated capitals of Pokua Ltd. and Nyarko Ltd are made up of 120,000 and 60,000 issued ordinary shares respectively. The shares were issued at GH¢1.00 each.

2. The group policy is to fair value non-controlling interest. The market price per share of Nyarko on 1 January 2010 was GH¢1.40.

3. On the date of acquisition, one item of plant of Nyarko with a book value of GH¢4,000 had a fair value of GH¢6,000. The plant had a remaining economic life of four years. The fair valuation had not been reflected in the separate statement of financial position of Nyarko Ltd.

4. An impairment review at 31 December 2012 revealed that the goodwill in respect of Nyarko Ltd. had fallen in value over the year by GH¢500. By 1 January 2013, this good would have already suffered impairments totalling GH¢1,700.
Solution:
Computation of Goodwill –Full Approach

<table>
<thead>
<tr>
<th>Item</th>
<th>Workings</th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of consideration</td>
<td>Step 284,000</td>
<td></td>
</tr>
<tr>
<td>Fair value of NCI</td>
<td>Extract 6: 20%<em>60,000</em>1.40</td>
<td>16,800</td>
</tr>
<tr>
<td>Total Fair value</td>
<td></td>
<td>100,800</td>
</tr>
<tr>
<td>Less: Fair value of Identifiable assets at acquisition</td>
<td>Step 5 83,000</td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td></td>
<td>17,800</td>
</tr>
<tr>
<td>Impairment</td>
<td>(2,200)</td>
<td></td>
</tr>
<tr>
<td>Consolidated SFP</td>
<td></td>
<td>15,600</td>
</tr>
</tbody>
</table>

Comment
Even though we only own 80% of the share capital, the full goodwill method brings 100% of the goodwill on to the consolidated statement of financial position. This is consistent with the treatment of other assets and the concept of control. This is why we need to include the fair value of the non-controlling interest in our goodwill calculation. Further issues include impairment and non-controlling interest's (NCI) share of goodwill. After computing the total goodwill arising on acquisition, it is prudent to compute the proportion attributable to NCI.

<table>
<thead>
<tr>
<th>Item</th>
<th>Workings</th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fair value of NCI</td>
<td></td>
<td>16,800</td>
</tr>
<tr>
<td>Less: NCI share of identifiable net assets acquired</td>
<td>83,000*20% 16,600</td>
<td></td>
</tr>
<tr>
<td>Goodwill</td>
<td></td>
<td>200</td>
</tr>
</tbody>
</table>

8.0 NON-CONTROLLING INTEREST
JA: How is non-controlling interest at the date of the SFP calculated?
KO: Step 7: Computation of NCI
In computing NCI: one can use one of two options:
1. OPTION 1: we take the totals of the SFP column in Step 5 and find NCI share and add NCI's goodwill
   GH¢
   NCI share of balance sheet column in Step 5: 87,000@20% 17,400
   NCI goodwill (Step 6) 200
   17,600

1. OPTION 2: we the NCI's fair value at acquisition and add NCI's share of post-acquisition reserves
   GH¢
   Fair value of NCI 16,800
   NCI share of post in Step 5: 20%*4,000 800
   17,600
9.0 CONSOLIDATED RESERVES

JA: How is Consolidated Reserve at the date of the SFP calculated?

KO: Step 8 Computation of Consolidated Reserves.

Follow the following rules.

- Rule 1: Pick 100% of retained earnings of the parent from the SFP
- Rule 2: add group share of post-acquisition dividend
- Rule 3: subtract group share of provision for unrealised profit
- Rule 4: add post acquisition reserve-of subsidiary
- Rule 5: subtract depreciation on fair value adjustment
- Rule 6: add Gain or subtract Group share of impairment of goodwill
- Rule 7: add post acquisition reserve-of associate

Note: the net effect of rule 3 to 6 can be obtained from step 5 under post

Extract (8a) from the Statement of Financial Position as at 31/12/12

<table>
<thead>
<tr>
<th>Item</th>
<th>Workings</th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Poku</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equity Funds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stated Capital</td>
<td>120,000</td>
<td>60,000</td>
</tr>
<tr>
<td>Income Surplus</td>
<td>56,000</td>
<td>16,000</td>
</tr>
<tr>
<td>Capital Surplus</td>
<td>41,000</td>
<td>13,000</td>
</tr>
<tr>
<td><strong>Nyarko</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Workings</th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income surplus of Pokua Ltd</td>
<td>56,000</td>
<td></td>
</tr>
<tr>
<td>Group share of post in Step 5</td>
<td>80%*4,000</td>
<td>3,200</td>
</tr>
<tr>
<td><strong>Consolidated Reserves</strong></td>
<td></td>
<td>59,200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Item</th>
<th>Workings</th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income surplus of Pokua Ltd</td>
<td>56,000</td>
<td></td>
</tr>
<tr>
<td>Group share of Nyarko Post Income Surplus</td>
<td>80%*8,000</td>
<td>6,400</td>
</tr>
<tr>
<td>Provision for unrealised profit</td>
<td>80%*800</td>
<td>(640)</td>
</tr>
<tr>
<td>Depreciation</td>
<td>80%*1,000</td>
<td>(800)</td>
</tr>
<tr>
<td>Impairment</td>
<td>80%*2,200</td>
<td>(1,760)</td>
</tr>
<tr>
<td><strong>Consolidated Reserves</strong></td>
<td></td>
<td>59,200</td>
</tr>
</tbody>
</table>

10.0 CONSOLIDATED FINANCIAL STATEMENT

JA: What is the basic formula for Consolidated Financial Position and Performance?

KO: Step 9: IFRS 10. Consolidated financial statements: [IFRS 10:B86]

Combine like items of assets, liabilities, equity, income, expenses and cash flows of the parent with those of its subsidiaries

Extracts (9) from the SFP as at 31/12/12, Adjustments and Group Accounts
<table>
<thead>
<tr>
<th></th>
<th>Pokua</th>
<th>Nyarko</th>
<th>Adjustments</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GH¢</td>
<td>GH¢</td>
<td></td>
<td>GH¢</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PPE</td>
<td>80,000</td>
<td>58,200</td>
<td>(2,000-1,000)</td>
<td>139,200</td>
</tr>
<tr>
<td>Investment</td>
<td>84,000</td>
<td></td>
<td>(84,000-84,000)</td>
<td>NIL</td>
</tr>
<tr>
<td>Goodwill</td>
<td></td>
<td></td>
<td>Step 6</td>
<td>15,600</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>154,800</td>
</tr>
<tr>
<td>Current assets</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventories</td>
<td>18,200</td>
<td>12,000</td>
<td>(800)</td>
<td>29,200</td>
</tr>
<tr>
<td>Receivables</td>
<td>62,700</td>
<td>21,100</td>
<td></td>
<td>83,800</td>
</tr>
<tr>
<td>Current account</td>
<td></td>
<td>3,200</td>
<td>Step 2</td>
<td>NIL</td>
</tr>
<tr>
<td>Cash &amp; bank</td>
<td>10,000</td>
<td>5,500</td>
<td>500</td>
<td>16,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>129,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>283,800</strong></td>
</tr>
</tbody>
</table>

| **EQUITY AND LIABILITIES** | | | | |
| Equity                   | | | | |
| Stated capital           | 120,000     | 60,000     | Step 10                      | 120,000     |
| Income Surplus           | 56,000      | 16,000     | Step 8                       | 59,200      |
| Capital Surplus          | 41,000      | 13,000     | Steps 5&6                    | 41,000      |
|                         |             |            |                              | 220,200     |
| NCI                      |             |            | Step 7                       | 17,600      |
| Total Equity             |             |            |                              | 237,800     |
| Liabilities              |             |            |                              |             |
| Trade & other payables   | 35,000      | 11,000     |                              | 46,000      |
| Current accounts         | 2,700       |            | Step 2                       | NIL         |
|                         |             |            |                              | **283,800** |

NOTE: Columns 1, 2 and 3 are extracts from the separate financial statements. Columns 4 and 5 are the workings and Group Financial Statement, respectively.

11.0 EQUITY CAPITAL

JA: I can see that you consolidated only the share capital of Pokua (the Parent) and showed a Step 10. What is the content of Step 10?

KO: **Step 10: Consolidated Equity Capital.** In basic group accounting, you should always use the share capital of the parent company.
12.0 CONCLUSION

KO: All said and done, these are the basic procedures for preparation of consolidated financial statement:
(a) Aggregate the assets and liabilities in the statement of financial position i.e. 100% P + 100% S irrespective of how much P actually owns. This shows the amount of net assets controlled by the group.
(b) Share capital is that of the parent only.
(c) Balance of subsidiary's reserves is consolidated (after cancelling any intra-group items).
(d) Calculate the non-controlling interest share of the subsidiary's net assets (share capital plus reserves).

JAY: Wow!! From all this knowledge shared, can I safely conclude that just like a family, a parent can have more than one child? If that is the case, the steps provided will require adjustments.
KO: That is a great observation you've got over there. We will discuss matters of that nature in our next meeting and article.

KO: Further reading:
ACCA Student Accountant 19 August 2008 for an article by the examiner, Steve Scott, entitled 'IFRS 3 Business Combinations (revised)'.
Further studies:
Solve November 2013 Paper 3.1 ICAG Exams

3.0 OVERVIEW OF IFRS 9

Initial measurement of financial instruments
All financial instruments are initially measured at fair value plus or minus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs. [IFRS 9, paragraph 5.1.1]

Subsequent measurement of financial assets
IFRS 9 divides all financial assets that are currently in the scope of IAS 39 into two classifications - those measured at amortised cost and those measured at fair value.

Where assets are measured at fair value, gains and losses are either recognised entirely in profit or loss (fair value through profit or loss, FVTPL), or recognised in other comprehensive income (fair value through other comprehensive income, FVTOCI).

For debt instruments the FVTOCI classification is mandatory for certain assets unless the fair value option is elected. Whilst for equity investments, the FVTOCI classification is an election. Furthermore, the requirements for reclassifying gains or losses recognised in other comprehensive income are different for debt instruments and equity investments.

The classification of a financial asset is made at the time it is initially recognised, namely when the entity becomes a party to the contractual provisions of the instrument. [IFRS 9, paragraph 4.1.1] If certain conditions are met, the classification of an asset may subsequently need to be reclassified.

Debt instruments
A debt instrument that meets the following two conditions must be measured at amortised cost (net of any write down for impairment) unless the asset is designated at FVTPL under the fair value option (see below): [IFRS 9, paragraph 4.1.2]
• **Business model test:** The objective of the entity’s business model is to hold the financial asset to collect the contractual cash flows (rather than to sell the instrument prior to its contractual maturity to realise its fair value changes).

• **Cash flow characteristics test:** The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt instrument that meets the following two conditions must be measured at FVTOCI unless the asset is designated at FVTPL under the fair value option (see below): [IFRS 9, paragraph 4.1.2A]

• **Business model test:** The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

• **Cash flow characteristics test:** The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other debt instruments must be measured at fair value through profit or loss (FVTPL). [IFRS 9, paragraph 4.1.4]

**Fair value option**
Even if an instrument meets the two requirements to be measured at amortised cost or FVTOCI, IFRS 9 contains an option to designate, at initial recognition, a financial asset as measured at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an 'accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases. [IFRS 9, paragraph 4.1.5]

**Equity instruments**
All equity investments in scope of IFRS 9 are to be measured at fair value in the statement of financial position, with value changes recognised in profit or loss, except for those equity investments for which the entity has elected to present value changes in 'other comprehensive income'. There is no 'cost exception' for unquoted equities.

'**Other comprehensive income' option**
If an equity investment is not held for trading, an entity can make an irrevocable election at initial recognition to measure it at FVTOCI with only dividend income recognised in profit or loss. [IFRS 9, paragraph 5.7.5]

**Measurement guidance**
Despite the fair value requirement for all equity investments, IFRS 9 contains guidance on when cost may be the best estimate of fair value and also when it might not be representative of fair value.

**Subsequent measurement of financial liabilities**
IFRS 9 doesn't change the basic accounting model for financial liabilities under IAS 39. Two measurement categories continue to exist: FVTPL and amortised cost.

Financial liabilities held for trading are measured at FVTPL, and all other financial liabilities are measured at amortised cost unless the fair value option is applied. [IFRS 9, paragraph 4.2.1]

**Fair value option**
IFRS 9 contains an option to designate a financial liability as measured at FVTPL if [IFRS 9, paragraph 4.2.2]:

- doing so eliminates or significantly reduces a measurement or recognition inconsistency (sometimes referred to as an 'accounting mismatch') that would otherwise arise from measuring assets or liabilities or recognising the gains and losses on them on different bases, or
the liability is part or a group of financial liabilities or financial liabilities that is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and information about the group is provided internally on that basis to the entity's key management personnel.

A financial liability which does not meet any of these criteria may still be designated as measured at FVTPL when it contains one or more embedded derivatives that sufficiently modify the cash flows of the liability and are not clearly closely related. [IFRS 9, paragraph 4.3.5]

IFRS 9 requires gains and losses on financial liabilities designated as at FVTPL to be split into the amount of change in fair value attributable to changes in credit risk of the liability, presented in other comprehensive income, and the remaining amount presented in profit or loss.

The new guidance allows the recognition of the full amount of change in the fair value in profit or loss only if the presentation of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss. That determination is made at initial recognition and is not reassessed. [IFRS 9, paragraphs 5.7.7-5.7.8]

Amounts presented in other comprehensive income shall not be subsequently transferred to profit or loss, the entity may only transfer the cumulative gain or loss within equity.

**Derecognition of financial assets**

The basic premise for the derecognition model in IFRS 9 (carried over from IAS 39) is to determine whether the asset under consideration for derecognition is: [IFRS 9, paragraph 3.2.2]

- an asset in its entirety or
- specifically identified cash flows from an asset (or a group of similar financial assets) or
- a fully proportionate (pro rata) share of specifically identified cash flows from a financial asset (or a group of similar financial assets)

Once the asset under consideration for derecognition has been determined, an assessment is made as to whether the asset has been transferred, and if so, whether the transfer of that asset is subsequently eligible for derecognition.

An asset is transferred if either the entity has transferred the contractual rights to receive the cash flows, or the entity has retained the contractual rights to receive the cash flows from the asset, but has assumed a contractual obligation to pass those cash flows on under an arrangement that meets the following three conditions: [IFRS 9, paragraphs 3.2.4-3.2.5]

- the entity has no obligation to pay amounts to the eventual recipient unless it collects equivalent amounts on the original asset
- the entity is prohibited from selling or pledging the original asset (other than as security to the eventual recipient),
- the entity has an obligation to remit those cash flows without material delay

Once an entity has determined that the asset has been transferred, it then determines whether or not it has transferred substantially all of the risks and rewards of ownership of the asset. If substantially all the risks and rewards have been transferred, the asset is derecognised. If substantially all the risks and rewards have been retained, derecognition of the asset is precluded. [IFRS 9, paragraphs 3.2.6(a)-(b)]

If the entity has neither retained nor transferred substantially all of the risks and rewards of the asset, then the entity must assess whether it has relinquished control of the asset or not. If the entity does not control the asset then derecognition is appropriate; however if the entity has retained control of the asset, then the entity continues to recognise the asset to the extent to which it has a continuing involvement in the asset. [IFRS 9, paragraph 3.2.6(c)]
These various derecognition steps are summarised in the decision tree in paragraph B3.2.1.

**Derecognition of financial liabilities**
A financial liability should be removed from the balance sheet when, and only when, it is extinguished, that is, when the obligation specified in the contract is either discharged or cancelled or expires. [IFRS 9, paragraph 3.3.1] Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial modification of the terms of an existing financial liability, this transaction is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. A gain or loss from extinguishment of the original financial liability is recognised in profit or loss. [IFRS 9, paragraphs 3.3.2-3.3.3]

**Derivatives**
All derivatives in scope of IFRS 9, including those linked to unquoted equity investments, are measured at fair value. Value changes are recognised in profit or loss unless the entity has elected to apply hedge accounting by designating the derivative as a hedging instrument in an eligible hedging relationship.

**Embedded derivatives**
An embedded derivative is a component of a hybrid contract that also includes a non-derivative host, with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. A derivative that is attached to a financial instrument but is contractually transferable independently of that instrument, or has a different counterparty, is not an embedded derivative, but a separate financial instrument. [IFRS 9, paragraph 4.3.1]

The embedded derivative concept that existed in IAS 39 has been included in IFRS 9 to apply only to hosts that are not financial assets within the scope of the Standard. Consequently, embedded derivatives that under IAS 39 would have been separately accounted for at FVTPL because they were not closely related to the host financial asset will no longer be separated.

Instead, the contractual cash flows of the financial asset are assessed in their entirety, and the asset as a whole is measured at FVTPL if the contractual cash flow characteristics test is not passed (see above).

The embedded derivative guidance that existed in IAS 39 is included in IFRS 9 to help preparers identify when an embedded derivative is closely related to a financial liability host contract or a host contract not within the scope of the Standard (e.g. leasing contracts, insurance contracts, contracts for the purchase or sale of a non-financial items).

**Reclassification**
For financial assets, reclassification is required between FVTPL, FVTOCI and amortised cost, if and only if the entity's business model objective for its financial assets changes so its previous model assessment would no longer apply. [IFRS 9, paragraph 4.4.1]

If reclassification is appropriate, it must be done prospectively from the reclassification date which is defined as the first day of the first reporting period following the change in business model. An entity does not restate any previously recognised gains, losses, or interest.

IFRS 9 does not allow reclassification:
- for equity investments measured at FVTOCI, or
- where the fair value option has been exercised in any circumstance for a financial assets or financial liability.

**Hedge accounting**
The hedge accounting requirements in IFRS 9 are optional. If certain eligibility and qualification criteria are met, hedge accounting allows an entity to reflect risk management activities in the financial statements by matching gains or losses on financial hedging instruments with losses or gains on the risk exposures they hedge.

The hedge accounting model in IFRS 9 is not designed to accommodate hedging of open, dynamic portfolios. As a result, for a fair value hedge of interest rate risk of a portfolio of financial assets or liabilities an entity can apply the hedge accounting requirements in IAS 39 instead of those in IFRS 9. [IFRS 9 paragraph 6.1.3]
In addition when an entity first applies IFRS 9, it may choose as its accounting policy choice to continue to apply the hedge accounting requirements of IAS 39 instead of the requirements of Chapter 6 of IFRS 9 [IFRS 9 paragraph 7.2.21]

**Qualifying criteria for hedge accounting**

A hedging relationship qualifies for hedge accounting only if all of the following criteria are met:

1. the hedging relationship consists only of eligible hedging instruments and eligible hedged items.
2. at the inception of the hedging relationship there is formal designation and documentation of the hedging relationship and the entity's risk management objective and strategy for undertaking the hedge.
3. the hedging relationship meets all of the hedge effectiveness requirements (see below) [IFRS 9 paragraph 6.4.1]

**Hedging instruments**

Only contracts with a party external to the reporting entity may be designated as hedging instruments. [IFRS 9 paragraph 6.2.3]

A hedging instrument may be a derivative (except for some written options) or non-derivative financial instrument measured at FVTPL unless it is a financial liability designated as at FVTPL for which changes due to credit risk are presented in OCI.

For a hedge of foreign currency risk, the foreign currency risk component of a non-derivative financial instrument, except equity investments designated as FVTOCI, may be designated as the hedging instrument. [IFRS 9 paragraphs 6.2.1-6.2.2]

IFRS 9 allows a proportion (e.g. 60%) but not a time portion (eg the first 6 years of cash flows of a 10 year instrument) of a hedging instrument to be designated as the hedging instrument.

IFRS 9 allows the intrinsic value of an option, or the spot element of a forward to be designated as the hedging instrument. An entity may also exclude the foreign currency basis spread from a designated hedging instrument. [IFRS 9 paragraph 6.2.4]

IFRS 9 also allows only the intrinsic value of an option, or the spot element of a forward to be designated as the hedging instrument. An entity may also exclude the foreign currency basis spread from a designated hedging instrument. [IFRS 9 paragraph 6.2.4]

**Hedged items**

A hedged item can be a recognised asset or liability, an unrecognised firm commitment, a highly probable forecast transaction or a net investment in a foreign operation and must be reliably measurable. [IFRS 9 paragraphs 6.3.1-6.3.3]

An aggregated exposure that is a combination of an eligible hedged item as described above and a derivative may be designated as a hedged item. [IFRS 9 paragraph 6.3.4]

The hedged item must generally be with a party external to the reporting entity, however, as an exception the foreign currency risk of an intragroup monetary item may qualify as a hedged item in the consolidated financial statements if it results in an exposure to foreign exchange rate gains or losses that are not fully eliminated on consolidation.

In addition, the foreign currency risk of a highly probable forecast intragroup transaction may qualify as a hedged item in consolidated financial statements provided that the transaction is denominated in a currency other than the functional currency of the entity entering into that transaction and the foreign currency risk will affect consolidated profit or loss. [IFRS 9 paragraphs 6.3.5-6.3.6]
An entity may designate an item in its entirety or a component of an item as the hedged item. The component may be a risk component that is separately identifiable and reliably measurable; one or more selected contractual cash flows; or components of a nominal amount. [IFRS 9 paragraph 6.3.7]

A group of items (including net positions is an eligible hedged item only if:

1. it consists of items individually, eligible hedged items;
2. the items in the group are managed together on a group basis for risk management purposes; and
3. in the case of a cash flow hedge of a group of items whose variabilities in cash flows are not expected to be approximately proportional to the overall variability in cash flows of the group:
   1. it is a hedge of foreign currency risk; and
   2. the designation of that net position specifies the reporting period in which the forecast transactions are expected to affect profit or loss, as well as their nature and volume [IFRS 9 paragraph 6.6.1]

For a hedge of a net position whose hedged risk affects different line items in the statement of profit or loss and other comprehensive income, any hedging gains or losses in that statement are presented in a separate line from those affected by the hedged items. [IFRS 9 paragraph 6.6.4]

**Accounting for qualifying hedging relationships**

There are three types of hedging relationships:

**Fair value hedge:** a hedge of the exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, or a component of any such item, that is attributable to a particular risk and could affect profit or loss (or OCI in the case of an equity instrument designated as at FVTOCI). [IFRS 9 paragraphs 6.5.2(a) and 6.5.3]

For a fair value hedge, the gain or loss on the hedging instrument is recognised in profit or loss (or OCI, if hedging an equity instrument at FVTOCI and the hedging gain or loss on the hedged item adjusts the carrying amount of the hedged item and is recognised in profit or loss. However, if the hedged item is an equity instrument at FVTOCI, those amounts remain in OCI. When a hedged item is an unrecognised firm commitment the cumulative hedging gain or loss is recognised as an asset or a liability with a corresponding gain or loss recognised in profit or loss. [IFRS 9 paragraph 6.5.8]

If the hedged item is a debt instrument measured at amortised cost or FVTOCI any hedge adjustment is amortised to profit or loss based on a recalculated effective interest rate. Amortisation may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for hedging gains and losses. [IFRS 9 paragraph 6.5.10]

**Cash flow hedge:** a hedge of the exposure to variability in cash flows that is attributable to a particular risk associated with all, or a component of, a recognised asset or liability (such as all or some future interest payments on variable-rate debt) or a highly probable forecast transaction, and could affect profit or loss. [IFRS 9 paragraph 6.5.2(b)]

For a cash flow hedge the cash flow hedge reserve in equity is adjusted to the lower of the following (in absolute amounts):

- the cumulative gain or loss on the hedging instrument from inception of the hedge; and
- the cumulative change in fair value of the hedged item from inception of the hedge.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in OCI and any remaining gain or loss is hedge ineffectiveness that is recognised in profit or loss.
If a hedged forecast transaction subsequently results in the recognition of a non-financial item or becomes a firm commitment for which fair value hedge accounting is applied, the amount that has been accumulated in the cash flow hedge reserve is removed and included directly in the initial cost or other carrying amount of the asset or the liability. In other cases the amount that has been accumulated in the cash flow hedge reserve is reclassified to profit or loss in the same period(s) as the hedged cash flows affect profit or loss. [IFRS 9 paragraph 6.5.11]

When an entity discontinues hedge accounting for a cash flow hedge, if the hedged future cash flows are still expected to occur, the amount that has been accumulated in the cash flow hedge reserve remains there until the future cash flows occur; if the hedged future cash flows are no longer expected to occur, that amount is immediately reclassified to profit or loss [IFRS 9 paragraph 6.5.12]

A hedge of the foreign currency risk of a firm commitment may be accounted for as a fair value hedge or a cash flow hedge. [IFRS 9 paragraph 6.5.4]

**Hedge of a net investment in a foreign operation** (as defined in IAS 21), including a hedge of a monetary item that is accounted for as part of the net investment, is accounted for similarly to cash flow hedges:

- the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in OCI; and
- the ineffective portion is recognised in profit or loss. [IFRS 9 paragraph 6.5.13]

The cumulative gain or loss on the hedging instrument relating to the effective portion of the hedge is reclassified to profit or loss on the disposal or partial disposal of the foreign operation. [IFRS 9 paragraph 6.5.14]

**Hedge effectiveness requirements**

In order to qualify for hedge accounting, the hedge relationship must meet the following effectiveness criteria at the beginning of each hedged period:

- there is an economic relationship between the hedged item and the hedging instrument;
- the effect of credit risk does not dominate the value changes that result from that economic relationship; and
- the hedge ratio of the hedging relationship is the same as that actually used in the economic hedge [IFRS 9 paragraph 6.4.1(c)]

**Rebalancing and discontinuation**

If a hedging relationship ceases to meet the hedge effectiveness requirement relating to the hedge ratio but the risk management objective for that designated hedging relationship remains the same, an entity adjusts the hedge ratio of the hedging relationship (i.e. rebalances the hedge) so that it meets the qualifying criteria again. [IFRS 9 paragraph 6.5.5]

An entity discontinues hedge accounting prospectively only when the hedging relationship (or a part of a hedging relationship) ceases to meet the qualifying criteria (after any rebalancing). This includes instances when the hedging instrument expires or is sold, terminated or exercised. Discontinuing hedge accounting can either affect a hedging relationship in its entirety or only a part of it (in which case hedge accounting continues for the remainder of the hedging relationship). [IFRS 9 paragraph 6.5.6]

**Time value of options**

When an entity separates the intrinsic value and time value of an option contract and designates as the hedging instrument only the change in intrinsic value of the option, it recognises some or all of the change in the time value in OCI which is later removed or reclassified from equity as a single amount or on an amortised basis (depending on the nature of the hedged item) and ultimately recognised in profit or loss. [IFRS 9 paragraph 6.5.15] This reduces profit or loss volatility compared to recognising the change in value of time value directly in profit or loss.
Forward points and foreign currency basis spreads

When an entity separates the forward points and the spot element of a forward contract and designates as the hedging instrument only the change in the value of the spot element, or when an entity excludes the foreign currency basis spread from a hedge the entity may recognise the change in value of the excluded portion in OCI to be later removed or reclassified from equity as a single amount or on an amortised basis (depending on the nature of the hedged item) and ultimately recognised in profit or loss. [IFRS 9 paragraph 6.5.16] This reduces profit or loss volatility compared to recognising the change in value of forward points or currency basis spreads directly in profit or loss.

Credit exposures designated at FVTPL

If an entity uses a credit derivative measured at FVTPL to manage the credit risk of a financial instrument (credit exposure) it may designate all or a proportion of that financial instrument as measured at FVTPL if:

- the name of the credit exposure matches the reference entity of the credit derivative (‘name matching’); and
- the seniority of the financial instrument matches that of the instruments that can be delivered in accordance with the credit derivative.

An entity may make this designation irrespective of whether the financial instrument that is managed for credit risk is within the scope of IFRS 9 (for example, it can apply to loan commitments that are outside the scope of IFRS 9). The entity may designate that financial instrument at, or subsequent to, initial recognition, or while it is unrecognised and shall document the designation concurrently. [IFRS 9 paragraph 6.7.1]

If designated after initial recognition, any difference in the previous carrying amount and fair value is recognised immediately in profit or loss [IFRS 9 paragraph 6.7.2]

An entity discontinues measuring the financial instrument that gave rise to the credit risk at FVTPL if the qualifying criteria are no longer met and the instrument is not otherwise required to be measured at FVTPL. The fair value at discontinuation becomes its new carrying amount. [IFRS 9 paragraphs 6.7.3 and 6.7.4]

Impairment

The impairment model in IFRS 9 is based on the premise of providing for expected losses.

Scope

IFRS 9 requires that the same impairment model apply to all of the following: [IFRS 9 paragraph 5.5.1]

- Financial assets measured at amortised cost;
- Financial assets mandatorily measured at FVTOCI;
- Loan commitments when there is a present obligation to extend credit (except where these are measured at FVTPL);
- Financial guarantee contracts to which IFRS 9 is applied (except those measured at FVTPL);
- Lease receivables within the scope of IAS 17 Leases; and
- Contract assets within the scope of IFRS 15 Revenue from Contracts with Customers (i.e. rights to consideration following transfer of goods or services).

General approach

With the exception of purchased or originated credit impaired financial assets (see below), expected credit losses are required to be measured through a loss allowance at an amount equal to: [IFRS 9 paragraphs 5.5.3 and 5.5.5]

- the 12-month expected credit losses (expected credit losses that result from those default events on the financial instrument that are possible within 12 months after the reporting date); or
- full lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instrument).
A loss allowance for full lifetime expected credit losses is required for a financial instrument if the credit risk of that financial instrument has increased significantly since initial recognition, as well as to contract assets or trade receivables that do not constitute a financing transaction in accordance with IFRS 15. [IFRS 9 paragraphs 5.5.3 and 5.5.15]

Additionally, entities can elect an accounting policy to recognise full lifetime expected losses for all contract assets and/or all trade receivables that do constitute a financing transaction in accordance with IFRS 15. The same election is also separately permitted for lease receivables. [IFRS 9 paragraph 5.5.16]

For all other financial instruments, expected credit losses are measured at an amount equal to the 12-month expected credit losses. [IFRS 9 paragraph 5.5.5]

Significant increase in credit risk

With the exception of purchased or originated credit-impaired financial assets (see below), the loss allowance for financial instruments is measured at an amount equal to lifetime expected losses if the credit risk of a financial instrument has increased significantly since initial recognition, unless the credit risk of the financial instrument is low at the reporting date in which case it can be assumed that credit risk on the financial instrument has not increased significantly since initial recognition. [IFRS 9 paragraphs 5.5.3 and 5.5.10]

The Standard considers credit risk low if there is a low risk of default, the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Standard suggests that 'investment grade' rating might be an indicator for a low credit risk. [IFRS 9 paragraphs B5.5.22 – B5.5.24]

The assessment of whether there has been a significant increase in credit risk is based on an increase in the probability of a default occurring since initial recognition. Under the Standard, an entity may use various approaches to assess whether credit risk has increased significantly (provided that the approach is consistent with the requirements). An approach can be consistent with the requirements even if it does not include an explicit probability of default occurring as an input. The application guidance provides a list of factors that may assist an entity in making the assessment. Also, whilst in principle the assessment of whether a loss allowance should be based on lifetime expected credit losses is to be made on an individual basis, some factors or indicators might not be available at an instrument level. In this case, the entity should perform the assessment on appropriate groups or portions of a portfolio of financial instruments.

The requirements also contain a rebuttable presumption that the credit risk has increased significantly when contractual payments are more than 30 days past due. IFRS 9 also requires that (other than for purchased or originated credit impaired financial instruments) if a significant increase in credit risk that had taken place since initial recognition and has reversed by a subsequent reporting period (i.e., cumulatively credit risk is not significantly higher than at initial recognition) then the expected credit losses on the financial instrument revert to being measured based on an amount equal to the 12-month expected credit losses. [IFRS 9 paragraph 5.5.11]
**Purchased or originated credit-impaired financial assets**

Purchased or originated credit-impaired financial assets are treated differently because the asset is credit-impaired at initial recognition. For these assets, an entity would recognise changes in lifetime expected losses since initial recognition as a loss allowance with any changes recognised in profit or loss. Under the requirements, any favourable changes for such assets are an impairment gain even if the resulting expected cash flows of a financial asset exceed the estimated cash flows on initial recognition. [IFRS 9 paragraphs 5.5.13 – 5.5.14]

**Credit-impaired financial asset**

Under IFRS 9 a financial asset is credit-impaired when one or more events that have occurred and have a significant impact on the expected future cash flows of the financial asset. It includes observable data that has come to the attention of the holder of a financial asset about the following events:

[IFRS 9 Appendix A]

- significant financial difficulty of the issuer or borrower;
- a breach of contract, such as a default or past-due event;
- the lenders for economic or contractual reasons relating to the borrower's financial difficulty granted the borrower a concession that would not otherwise be considered;
  - it becoming probable that the borrower will enter bankruptcy or other financial reorganisation;
  - the disappearance of an active market for the financial asset because of financial difficulties; or
  - the purchase or origination of a financial asset at a deep discount that reflects incurred credit losses.

**Basis for estimating expected credit losses**

Any measurement of expected credit losses under IFRS 9 shall reflect an unbiased and probability-weighted amount that is determined by evaluating the range of possible outcomes as well as incorporating the time value of money. Also, the entity should consider reasonable and supportable information about past events, current conditions and reasonable and supportable forecasts of future economic conditions when measuring expected credit losses. [IFRS 9 paragraph 5.5.17]

The Standard defines expected credit losses as the weighted average of credit losses with the respective risks of a default occurring as the weightings. [IFRS 9 Appendix A] Whilst an entity does not need to consider every possible scenario, it must consider the risk or probability that a credit loss occurs by considering the possibility that a credit loss occurs and the possibility that no credit loss occurs, even if the probability of a credit loss occurring is low. [IFRS 9 paragraph 5.5.18]

In particular, for lifetime expected losses, an entity is required to estimate the risk of a default occurring on the financial instrument during its expected life. 12-month expected credit losses represent the lifetime cash shortfalls that will result if a default occurs in the 12 months after the reporting date, weighted by the probability of that default occurring.

An entity is required to incorporate reasonable and supportable information (i.e., that which is reasonably available at the reporting date). Information is reasonably available if obtaining it does not involve undue cost or effort (with information available for financial reporting purposes qualifying as such).

For applying the model to a loan commitment an entity will consider the risk of a default occurring under the loan to be advanced, whilst application of the model for financial guarantee contracts an entity considers the risk of a default occurring of the specified debtor. [IFRS 9 paragraphs B5.5.31 and B5.5.32]
An entity may use practical expedients when estimating expected credit losses if they are consistent with the principles in the Standard (for example, expected credit losses on trade receivables may be calculated using a provision matrix where a fixed provision rate applies depending on the number of days that a trade receivable is outstanding). [IFRS 9 paragraph B5.5.35]

To reflect time value, expected losses should be discounted to the reporting date using the effective interest rate of the asset (or an approximation thereof) that was determined at initial recognition. A “credit-adjusted effective interest” rate should be used for expected credit losses of purchased or originated credit-impaired financial assets. In contrast to the “effective interest rate” (calculated using expected cash flows that ignore expected credit losses), the credit-adjusted effective interest rate reflects expected credit losses of the financial asset. [IFRS 9 paragraphs B5.5.44-45]

Expected credit losses of undrawn loan commitments should be discounted by using the effective interest rate (or an approximation thereof) that will be applied when recognising the financial asset resulting from the commitment. If the effective interest rate of a loan commitment cannot be determined, the discount rate should reflect the current market assessment of time value of money and the risks that are specific to the cash flows but only if, and to the extent that, such risks are not taken into account by adjusting the discount rate. This approach shall also be used to discount expected credit losses of financial guarantee contracts. [IFRS 9 paragraphs B5.5.47]  

Presentation  

Whilst interest revenue is always required to be presented as a separate line item, it is calculated differently according to the status of the asset with regard to credit impairment.  

In the case of a financial asset that is not a purchased or originated credit-impaired financial asset and for which there is no objective evidence of impairment at the reporting date, interest revenue is calculated by applying the effective interest rate method to the gross carrying amount. [IFRS 9 paragraph 5.4.1]

In the case of a financial asset that is not a purchased or originated credit-impaired financial asset but subsequently has become credit-impaired, interest revenue is calculated by applying the effective interest rate to the amortised cost balance, which comprises the gross carrying amount adjusted for any loss allowance. [IFRS 9 paragraph 5.4.1]

In the case of purchased or originated credit-impaired financial assets, interest revenue is always recognised by applying the credit-adjusted effective interest rate to the amortised cost carrying amount. [IFRS 9 paragraph 5.4.1] The credit-adjusted effective interest rate is the rate that discounts the cash flows expected on initial recognition (explicitly taking account of expected credit losses as well as contractual terms of the instrument) back to the amortised cost at initial recognition. [IFRS 9 Appendix A]

Consequential amendments of IFRS 9 to IAS 1 require that impairment losses, including reversals of impairment losses and impairment gains (in the case of purchased or originated credit-impaired financial assets), are presented in a separate line item in the statement of profit or loss and other comprehensive income.

Disclosures  

IFRS 9 amends some of the requirements of IFRS 7 Financial Instruments: Disclosures including adding disclosures about investments in equity instruments designated as at FVTTOCI, disclosures on risk management activities and hedge accounting and disclosures on credit risk management and impairment.
4.0 THE KEY ISSUES DETERMINING OFFSHORING SUCCESS IN GHANA IN THE FUTURE

Offshoring has become a common strategy for many organisations in the services sector as a consequence of the increased tradability of services, arising from trade liberalisation and rapid technological developments. Traditionally associated with manufacturing, the subject of offshoring tends to attract a lot of discussion. With the services industry rapidly increasing in importance, there is much debate as to what growth in offshoring services might mean for the economic future of Ghana and Africa at large.

Four key drivers of change have enabled a greater rate of offshoring and are expected to affect, and in some cases significantly disrupt, the future of services offshoring in Ghana and Africa at large.

Globalisation: Reduction of trade barriers, the ECOWAS trade agreements, and recent free trade agreements with Europe have enabled freer movement of business, investment, labour and resources between Ghana and other countries, making it easier to offshore services in both directions.

Globalisation has also increased competitive pressures, motivating organisations to reduce costs and increase growth through offshoring.

Technological advancements: Rapid advancements in technology have made services offshoring a viable and cost-effective business strategy for many organisations. In this connected world, any work that can be done on computers can be done anywhere in the world. Greater adoption of technology such as enterprise mobility, big data, virtual desktops and cloud computing may drive increased offshoring in the future.

Ghana economic development: Rapid development in Ghana has increased skill levels and professionalism in more mature offshoring markets. With higher skills come higher wages, and movement along the value chain into more complex business process outsourcing (BPO) and IT offerings. At the same time, more recent entrants to the business services offshoring market position themselves as low-cost locations for lower-value work.

Domestic skills shortages and a global labour market: Offshoring is not simply a question of cost cutting, and other motivations are becoming increasingly important, for example, having access to skilled employees in areas where onshore competition makes talent scarce. The concept of offshoring itself is also changing, as – due to technological advancements – labour is no longer tethered to fixed capital. Tasks can now be easily outsourced to offshore freelancers, or even automated via the cloud.

Recognising the increasing importance of offshoring in services, a number of key issues have to be taken into consideration. These issues will determine offshoring success in the future, as the business case for offshoring continues to change and offshored functions become more complex. Key issues to consider include:

- recognising the diverse range of benefits
- preparing and getting buy-in
- dealing with risks and challenges
- finding the right offshoring model
- finding the right location
- planning for the future.

While offshoring of services has never been easier, it is not necessarily a sure-fire recipe for success. Planning for offshoring – now and in the future – is important, especially as Ghanaian services organisations tend to be behind their international counterparts in making offshoring part of their business model.
RECOGNISING THE DIVERSE RANGE OF BENEFITS
The benefits from offshoring continue to move away from pure cost savings. Offshoring can enable organizations to operate more effectively. Future benefits include access to a more diverse range of skills, movement to higher value-added work onshore, and onshore employee retention.

LOWER COSTS AND COMPETITIVE PRESSURES
Consultation with industry suggests that one of the primary motivations when organizations are beginning to consider whether to move particular functions or processes offshore is the lower costs associated with offshoring. Competitive pressures such as increased competition from overseas organizations entering domestic markets, or smaller client and customer bases in the aftermath of the Global Financial Crisis, have motivated organizations to look towards cost-cutting measures as a means of maintaining profits. Furthermore, as offshoring has become a business strategy that is widely employed across various sectors, some organizations have adopted offshoring practices simply to be able to compete with others in their industry.

In moving functions offshore, Ghanaian organisations should expect generally labour cost savings across a range of business functions, including both back-office and (easily commoditised) front-office tasks. Some organisations choose to pass these savings on to customers or clients in order to offer more competitive prices and increase market share, while others have opted to maintain their prices and secure larger margins.

Given that many industries continue to be disrupted by new and increasing competitive forces – such as the emergence of online sources of competition – this cost saving benefit will remain an important motivator for offshoring in the future. At the same time, the potential cost savings associated with moving services offshore could decrease in the future as rising economic growth in the developing countries traditionally chosen as offshoring locations drives higher wages across the labour market.

These trends could have significant implications for organisations’ motivations in offshoring services with respect to the drivers of cost savings and competitive pressures.

ACCESS TO A DIVERSE POOL OF SKILLED EMPLOYEES
The other key motivation that Ghanaian organizations may have for offshoring is the ability to access a larger and more diverse pool of skilled employees to overcome domestic skills shortages. The benefits associated with this are two-fold. Firstly, it allows organizations to employ specialist knowledge and resources that might not have been available domestically – niche IT skills such as specialized technical developers was one area where this benefit was viewed as being particularly important. Therefore, the quality of the work performed in the offshore centre would be better. More generally, any skills shortages experienced by organizations onshore can potentially be mitigated by using offshore employees, who are becoming increasingly qualified. This motivation could become more important in the future as domestic labour markets become tighter with increasing baby boomer retirements, while offshore locations offer an increasing supply of high-quality labour.

WHAT IS THE FUTURE FOR OFFSHORING?
The second benefit associated with being able to access more employees is that it provides organizations with a degree of workforce flexibility that would be difficult to achieve in-house. Offshore employees that are hired on a flexible basis can allow organizations to employ a core team of onshore employees to handle the expected or regular workflow while still ensuring that the organization has capacity to take on additional work during busy periods. In some cases, the agility and flexibility provided by having an offshore team enables organizations to engage in large projects that otherwise would not be achievable with the onshore team alone, because of the requirement to be able to scale up quickly. Offshoring can provide an efficient staffing model that allows organizations to have onshore employees to manage continuous workflow while still retaining the flexibility to deal with the peaks.
MOVEMENT TO HIGHER VALUE-ADDED WORK AND ONSHORE EMPLOYEE RETENTION

Another benefit that organizations report is that by offshoring basic routine tasks such as low-level data processing and information gathering, onshore employees are able to move to higher value-added tasks, such as higher-level analysis or engaging more with current and potential new clients and customers. This may be particularly beneficial for smaller organizations, where the domestic time savings generated by offshoring particular tasks can have a greater impact on the resourcing capacity of the organization as a whole.

This outcome also benefits domestic employees, with organisations reporting that onshore employees generally have little interest in working on the basic routine tasks that are commonly offshored. As offshoring these tasks can allow junior employees to be fast-tracked up to higher-level work, consultations indicate this often leads to an improvement in employee retention. Onshore employees are not only able to work on tasks that they view as more interesting, but there could also be opportunities for faster career progression from a graduate level in certain industries – particularly if these junior employees take a role in managing the offshore team. In doing so, it is important that the domestic team continues to maintain some capabilities in the tasks being offshored, so that they are able to understand and manage the work that is sent back from offshore.

PREPARING AND GETTING BUY-IN

As offshored functions are quickly becoming a more significant part of day-to-day operations in many organizations, long-term commitment and buy-in are critical for success. While a broader and more mature range of offshoring options and technological advancements make offshoring easier, good preparation, a clear strategy, and continuous review and recalibration will be even more important in the future. Success is not guaranteed.

TEAM SUPPORT AND COMMITMENT

Having the support and commitment of domestic employees within the organisation is important for offshoring to become part of a long-term business strategy. While this is applicable to employees across all levels of the organisation, the support of the leadership team is particularly critical to ensure the quick and smooth implementation of any offshoring strategy.

Industry consultations suggest that in organisations where offshoring has been developed organically across an organisation (rather than being mandated), business functions aligned to senior executives who were more supportive of offshoring and more engaged in the process tended to have greater success in setting up an offshoring unit compared to those that were not.

As an organisation's senior leadership determines the strategic direction of offshoring decisions, it is essential that they are committed to the entire process to ensure an efficient and effective transition between onshore and offshore operations. To change or a low appetite for risk within the senior management team can be significant hurdles to overcome when offshoring. Conversely, having senior executives that are motivated to use offshoring to achieve other strategic outcomes (such as shifting to a more customer-centric model) can help to drive the implementation of an offshoring strategy. In the future, as the number and complexity of tasks moving offshore increases, the commitment and support of the senior leadership team will be an important factor in determining the success of offshoring ventures. Strategic planning at the high level with a long-term framework in mind can help to mitigate future risks and challenges that could arise.

A common perception that may surround offshoring in Ghana is that it involves “sending local jobs offshore”. It is therefore important that when preparing to implement an offshoring strategy, organisations keep their employees informed on the process – the purpose of offshoring, how it will happen and the role of domestic employees in the future model – and discuss their concerns and perceptions on offshoring.
In general, organisations in Australia for instance, which have undergone offshoring reported that offshoring did not result in reducing existing employee numbers onshore. While in some cases future hiring was reduced after moving functions offshore, the purpose of offshoring was primarily to add to the resourcing capacity of the organisation rather than relocating entire units overseas. Communicating these intentions to the broader workforce in a clear and timely manner can help to allay some of the common concerns surrounding offshoring.

PROCESSES AND QUALITY CONTROL
It is essential that in preparing to offshore, organizations have the right systems and processes already in place. Generally, organizations reported that any inherent problems within their internal processes were not solved by offshoring – the same issues were experienced by the offshore team and these were reflected in the work that was sent back to the onshore office. Any tasks or processes that are sent to be done offshore need to be clearly mapped out by the domestic team, with instructions provided to the offshore team. One example highlighted by industry was of organizations looking to offshore particular functions shortly after significant merger and acquisition activity. These organizations tended to have greater difficulties with offshoring because their operations had not been properly consolidated and organized before moving them offshore.

Even once these business processes have been streamlined and communicated to the offshore team, it is important when preparing an offshoring strategy that quality control standards and procedures are implemented internally to ensure that the work received from offshore is of sufficient quality.

This is particularly important for organizations just starting to offshore, as they work to build an understanding of expected standards with the offshore team.

A number of organizations that were consulted had only decided to expand their offshore operations once quality standards had been assessed as being adequate following the initial move offshore. As a number of countries are now becoming established centres for business and knowledge process offshoring, organizations looking to offshore in the future may be more confident in their ability to source appropriately skilled employees in these offshore locations, enabling more rapid expansion of offshoring operations.

DEALING WITH RISKS AND CHALLENGES
Traditional risks and challenges to offshoring have included regulatory concerns and cultural differences, but new issues are emerging that will need addressing in the future, such as retaining offshore employees in an increasingly competitive environment and offshoring more complex tasks.

RETAINING OFFSHORE EMPLOYEES
Employee retention overseas was highlighted by a number of organisations as a challenge associated with offshoring. One reason for this may be that the tasks being sent offshore are typically low-end jobs that can be repetitive or not very interesting. While some organisations have found that offshore employees can be more willing to specialise in such areas compared to their employees in Ghana, in general the key to retaining offshore employees is ensuring that people have diversity in their work and can progress their careers over time.

Another relevant issue is increasing competition between organizations for quality or specialist offshore employees in particular locations. In established centres for offshoring, where many international services organizations are represented, such as India and the Philippines, employee turnover can be higher due to a more competitive labour market. A number of organizations noted that turnover is particularly an issue in large cities, where demand for quality employees is high.
Economic development in Ghana and Africa could see employee retention become an increasing challenge in the future. Although there is a growing supply of high-quality labour, the competition for talent increases as more organisations choose to offshore more complex business functions. Offering higher pay is not the only way to attract and retain offshore talent. Other factors such as an inclusive culture, employee engagement and diverse career paths are also key considerations. Solutions could include rotating people across processes and tasks, or allowing them to do higher-level work that is more technical or analytical as they advance through their careers. One example of this is having offshore employees who have built some experience in processing data move onto analysing the data to draw out relevant insights. This also benefits the organisation as the offshoring team offers more value in the tasks performed.

REGULATORY CONCERNS AND RISKS
The regulatory framework in offshore locations can have a significant impact on offshoring decisions. Regulatory risks are a concern – both in countries that have poor regulatory frameworks and those where the government does not enforce the regulations that are in place. This was viewed as an issue not just because of the difficulties associated with offshoring in a country with a poor regulatory framework, but also because of the potential impact on customer and client perceptions.

Organisations generally deal with these regulatory risks by choosing not to offshore in countries where there are concerns surrounding the regulatory framework – even if it would make sense to have an offshore presence there in the context of the organisation's capabilities.

In addition, some organisations have used previous experiences in other countries (for example, setting up an office in an overseas location or early experiences with offshoring to particular locations through third-party providers) to assess the potential regulatory challenges that could arise when offshoring in a particular destination.

One particular regulatory concern that could have an increasing impact in the future is a country's privacy laws and standards. Industry consultations suggest that in some countries, the standards surrounding privacy mean that the government is legally able to access client and other information of organisations with offshore operations in that jurisdiction. This could apply even if an organisation is only using IT services, such as cloud technology or automation services, hosted in the jurisdiction. This then raises concerns regarding whether data security and information confidentiality, including domestic laws and regulations, might be compromised. Given that global interconnectivity is expected to increase and the use of cloud computing and automation is on the rise, these privacy concerns could become a more critical risk factor in the future when organisations decide on where to locate their offshore operations.

CULTURAL DIFFERENCES
One challenge that is generally underestimated by those looking to offshore is that cultural differences can be a large barrier to a successful offshoring strategy if they are not addressed.

These differences include interpretations of local language, and local slang words that are not used elsewhere, as well as verbal tones and cues that can get lost in translation across different cultures (for example, a misunderstanding of sarcasm by offshore employees that come from a more “literal” culture).

Cultural understanding differs based on the offshore location, but is important in ensuring that offshore employees are integrated with the onshore team – particularly in the future, as offshoring tasks become more integrated. Cultural differences can be bridged through cross-office interactions such as visits between the offshore and onshore teams and offices. As organisations become more experienced in offshoring, they offer cultural training programmes to educate offshore teams in local culture.
In general, it appears that cultural differences are a challenge that can be overcome through education and frequent engagement between offshore and onshore employees; however, the concern is that organisations often underestimate the costs and time required to do so. Cultural differences should be addressed by promoting mutual understanding between onshore and offshore teams, rather than seeking to impose the onshore culture on the offshore office (both with respect to social and work culture). One way of resolving this culture issue is the idea of using compromise to get around cultural differences, and being flexible enough to adapt business processes to suit the offshore team's culture.

FINDING THE RIGHT OFFSHORING MODEL
Offshoring strategies are numerous and varied, with each presenting its own set of advantages and challenges. Organizations should understand that there is no “silver bullet”. The most appropriate offshoring model will be unique to an organization's current and future needs and the environment it operates in.

While some organizations will continue to move towards an outsourcing model as they become more experienced in offshoring, others may back away from such a model, instead reincorporating newly captive functions to be part of their core business.

CAPTIVE OFFSHORE
While offshoring as a concept is often thought of as a rather homogenous collection of strategies, the reality is quite the opposite. Offshoring strategies are both numerous and varied, each presenting its own set of advantages and challenges. One model used by organizations who wish to retain control over their offshore operations, is captive offshore centres, which are owned and operated by the organization onshore. These centres need not operate merely as an offshore office that services the organization onshore, but can instead operate as a self-contained office servicing a market overseas while also performing work for the organization onshore.

For those with overseas offices, this can be a way to: build overflow capacity in offshore locations, test the offshoring waters using an in-house model, and encourage a modern business model where work can be packaged, and performed by anyone with the right set of skills.

While many early players in the offshore market established captive offshore models in places like India, some have since sold those offices to third parties and hired back the services on a contract basis. However, a recent trend of returning key functions to captive offshore sites reveals a future challenge for those considering offshore outsourcing. Outsourcing core competencies, or those business functions that handle confidential or sensitive information, can lead an organization to lose depth of capability and data security.

OFFSHORE OUTSOURCING
Outsourcing as an offshore solution has grown in popularity since the 2000s. The offshore outsourcing industry is enormous and dominated by major offshore service providers (such as IBM, Accenture and Tata) and major offshore destinations (such as the US, India or the Philippines). For instance, India's National Association of Software and Service Companies estimates that offshore IT, BPO and contact centre work now accounts for 25% of India's exports, with offshore outsourcing popular due to its lower investment costs and flexible options.

While some organisations remain concerned about quality and risk, providers have become more advanced in addressing such concerns (such as through onshore tests). Success often has more to do with building partnerships with the offshore service provider and its employees. Organisations cannot assume that it is a “set and forget” situation, and must invest in the relationship, align employee and organisation incentives, and provide training where appropriate (such as cultural training for contact centres).

One of the primary advantages of engaging an offshore third party is the flexibility it provides, and the increasing quality of service driven by competition between providers.
This flexibility can be dramatically reduced as switching costs increase, and yet without investment in training and relationship building, organisations onshore cannot expect to reap the full benefits of offshore outsourcing. Consultations suggest that it can take time, and extensive engagement with service providers to ensure that they understand onshore requirements, and can therefore add real value by proposing new capabilities rather than merely meeting demands.

Consultations have also revealed that outsourcing contracts can require careful monitoring due to the risk of perverse incentives.

For example, in a well-established outsourcing relationship, where benchmarks are revised based on previous performance, service levels may plateau as providers seek to avoid having their targets revised upwards.

FREELANCE OFFSHORE EMPLOYEES
A more recent trend in outsourced offshoring is that of freelancing. Freelancers provide a low-cost, small-scale alternative to more traditional outsourced offshoring, and allow organisations to take advantage of talent from a wider range of locations without long-term contracts and start-up expenses. Freelance platforms such as Upwork and Work Market allow organisations to link with freelancers in higher-risk locations such as Pakistan and Ukraine, without having to make significant investment in those locations.

The future of freelancing is undoubtedly bright within developed economies such as the United States, where the industry derives a lot of strength from the supply side, as modern employees increasingly expect more control over how and when they work. In the world of offshoring, the future is less certain, though the potential is enormous. The combination of freelancer platforms, and co-working space providers such as WeWork, may create collaborative workplaces where individuals may use their skills for overseas clients. Domestic organizations can therefore access offshore talent without cumbersome service level agreements or significant investment in high-risk locations. This transition will be made easier as freelancing grows in popularity, and perceptions of freelancers evolve from temporary staff at small enterprises, to strategic hires for large organizations.

FINDING THE RIGHT MODEL
As there is not one model that suits all types of organisations, choosing the most suitable model is about working out the strengths and weaknesses, leveraging existing assets (such as offshore offices) and doing the research.

Regular reviews of offshoring arrangements are also an important part of any successful strategy.

Reviews should be implemented to ensure targets are being met, and relevant relationships are being managed effectively. Consultations indicate that cultural differences in certain offshore locations can often lead to overwhelmingly positive performance reviews that do not reflect reality, and this may necessitate more rigorous review processes.

At the same time, organizations need to be aware of their long-term strategy. For instance, significant investment in offshore capacity now may not be appropriate if automation combined with onshore capacity will be sufficient within a ten-year timeframe. Offshoring also poses the danger of important skills being lost in the onshore office, so it is essential that organizations identify what should be retained in-house. Overall, it is important that organizations continuously review and recalibrate their model to ensure it remains appropriate.

FINDING THE RIGHT LOCATION
With an increasing range of potential offshoring locations to choose from, organisations will find it easier to diversify their offshoring networks and tap into different capabilities and skills across geographies. It is critical to understand the different types of future benefits that different locations can provide.

UNDERSTANDING THE SKILLS NEEDED
Rapid economic development in emerging economies, as well as the proliferation of offshore service providers, has dramatically increased the diversity of offshore locations.
As with finding the right offshoring model, finding the right location is far from straightforward. At the heart of offshoring is a desire to realise efficiencies, such as in the recruitment process or labour rates. On the surface, this can appear to be a rather simple process. Developed nations offer skilled employees in stable political environments, and in some places, such as “tier 2” cities in the United States, this labour force can often prove more affordable than in local markets. Equally, developing nations have in recent years experienced strong growth in both rates of education and levels of attainment. Along with strong overall economic growth, this has produced enormous pools of skilled employees in modern cities all over the world.

BEWARE OF THE HIDDEN COSTS

It is important that organizations look beyond simply lower wages when making decisions about the location. Each offshore location carries with it additional costs in much the same way that onshore operations require overhead expenditure. As well as infrastructure and regulatory costs, low-cost labour may require additional supervision. This may simply require external service providers to manage and report on operations overseas, or it may also require the relocation of onshore management. These costs tend to increase with cultural and language barriers, and consultation with industry has revealed a preference for countries with a strong tradition of English language education, and use of English in government, such as India, Nigeria, Kenya and the Philippines. Additionally, instability in the location’s foreign currency may make it harder to forecast the expected cost savings, particularly in the short to medium term.

Beyond these more obvious concerns, consultations have shed light on more subtle anxieties. Relevant experiences include a desire to avoid jurisdictions where client information may be compulsorily obtained under national security legislation (including the United States), as well as those jurisdictions where closing offshore operations can lead to lengthy legal battles with overseas authorities. In the coming years, as new offshore destinations emerge, and mature markets seek to differentiate themselves, operating environments and regulation are likely to become more business-friendly, and the cost of operation in unfamiliar markets will come down. However, unlike corruption, political instability or inefficient regulations – which tend to decrease with economic development – invasive national security legislation remains a feature of even the most advanced democracies. Understanding these potential costs is an important step in finding the right offshore location, and there are many ways of mitigating risk. Partnering with organizations overseas, whether as external service providers or as part of a joint venture, has been regularly noted as a successful strategy by providing an on-the-ground understanding of political and legal systems.

In selecting the right offshore location, however, it is important to be aware of the hidden benefits as well. By maintaining offshore operations in overseas markets, organisations often gain both a deeper understanding of those markets, their drivers and opportunities, and exposure to industry players. Such understanding can be useful in later efforts to expand into those markets, and this potential upside is a worthwhile consideration when selecting an offshore destination.

CURRENT AND FUTURE OFFSHORING LOCATIONS

In the early days of offshoring, many large organisations established a presence in Asia. Since then, offshoring has grown to become such a significant part of many Asian economies that the region now dominates the global offshoring market, offering a variety of value propositions.
India is regularly described as the most desirable offshoring location, with particular expertise in IT, BPO and contact centre operations. As major Indian cities have developed around the industry, so too have the services evolved. Service providers that once offered skills in basic, commoditised tasks are now providing complex IT services, bundled BPO services and even R&D.

China, which has more recently emerged as a desirable offshoring location, is fast developing a reputation in the IT sector, though wages are in some cases rising faster than in competitor nations. Elsewhere in Asia, Thailand and Indonesia have gained popularity due to their large, well-educated populations, although organizations expressed concern regarding the quality of English language education. This is less of an issue in countries like the Philippines, where many organizations now have contact centre operations. The Philippines, among others, has also benefited from concerted government efforts to promote the BPO sector and insulate it from risks such as endemic corruption, by establishing the Philippine Economic Zone Authority.

Importantly, offshoring is not limited to emerging economies or low-cost destinations, and the prominence of the business services trade between Australia, New Zealand and the United States is evidence of the success that can be achieved through offshoring work to traditionally high-cost jurisdictions.

**WHAT IS THE FUTURE FOR OFFSHORING?**

The diversity of offshoring locations will only continue to increase in the future, making it even more important for organizations to understand why they choose offshoring and what they want from an offshoring location (be it low labour costs, particular technical skills, language capabilities or a low-risk business and legal environment).

**PLANNING FOR THE FUTURE**

Offshoring as a business proposition is undergoing rapid change, and many organizations are unsure what the services sector will look like in ten years – making planning for the future challenging. At the same time, new technology trends such as automation will disrupt the offshoring model itself.

**AUTOMATION**

Planning for the future of offshoring is difficult. The offshoring industry is moving at a remarkable pace, and this will only increase as technology continues to facilitate new offshoring models and reduce the significance of geographic boundaries. Perhaps the most significant shift in offshoring over the coming years will be the movement toward automation of operations. Already, sectors such as finance in which highly skilled roles also require employees to complete small, time-consuming tasks, are looking to robotic solutions to increase time spent on high-value activities. However, this trend is not limited to basic tasks. Already, software is available that in 15 minutes can perform tasks that previously occupied urban planning and engineering professionals for weeks. By drawing on enormous databases, and learning from results, computers are performing increasingly complex tasks with ease.

This trend is not important for offshoring because it necessarily involves payment to an overseas software provider; rather it is important because: it will radically alter the way in which offshoring is used, and offshore service providers will be forced to improve their value proposition as low-level tasks become automated suggest that organisations onshore are increasingly looking to offshore service providers to introduce organisations to the potential of automation and facilitate that development. Automation may reduce dependence on offshore headcount, as organisations look to automatic problem detection and basic trouble-shooting, lessening the need for contact centre and problem resolution employees.
Automation is not, however, an immediate or panacean solution. Just as with offshoring, organisations will be hesitant to make significant investments. This is especially true of high-cost software, which renders organisations beholden to technology providers. Despite this, an understanding of robotic process automation is an important part of forward looking analysis. Organisations must ask how automation will play a role in future operations, how it might reduce or change their reliance on offshore operations, and whether offshore capacity will be a useful or necessary complement.

**HUMAN CAPITAL**

In a similar vein is the need for organisations to manage the impact of offshoring (and indeed, automation) on their human capital. The search for wage-cost savings can often lead to the sacrifice of employees' development, and organisations need to be aware of what they could lose in the process.

Consultation with industry revealed that many organisations with offshore operations tended to lack long-term plans for offshore employees. This raises two key issues. The first is that in high competition regions such as the Philippines, employee turnover rates are often unattractive due to the lack of investment in employee retention. This can lead to significant expense.

The second is that over time and with increasing skills levels, career consideration given to offshore employees becomes increasingly important. While contractors may not require such career development, a permanent staffing model requires training and options for career progression.

Industry accounts reveal that offering career pathways, and treating offshore employees with the same respect afforded to onshore employees, increases employee engagement, reduces turnover, and in turn increases the quality of output.

Another aspect that will be important in the future is that as the basic or lower value-added tasks are offshored (or indeed automated), the onshore career ladder for new graduates will be missing the bottom rungs. Graduates will be expected to start at a different level or have different skillsets, such as high levels of reasoning, judgement and strong creative and collaboration skills. These structural changes will have a profound implication for services organisations as well as the tertiary education sector. Universities will need to review their curriculum to ensure they are preparing graduates for future roles. Without change, they could be preparing graduates for entry level jobs that no longer exist or that will require different skillsets. Organisations also have a role to play working with the education sector around the skillsets they are looking for and the jobs they have to fill.
5.0 PAST EXAMINATION QUESTIONS

NOVEMBER 2015 PROFESSIONAL EXAMINATIONS
MANAGEMENT ACCOUNTING (2.2)
EXAMINERS GENERAL COMMENTS

GENERAL PERFORMANCE
In general, the performance of students were not good as expected, given that, the questions were all reasonable to have produced average performance but this was not the case. Students who studied well had it easy and scored above 15 marks in each question and a good number scored 20 marks in two of the questions. Some students rather failed the budget questions which appeared to be the easiest. It was expected that, this question would have been the best for all students. In all the performance was below average and generally spread across all centers. There were no strong similarities in the solutions of students. The performance only reflected low level of preparedness by students and poor predictability of questions by students.

STANDARD OF THE PAPER
This paper was relatively easy as compared to May, 2015 Management Accounting questions. The mix of question was generally good with straight forward questions. The level of ambiguities if any was very minimal with exception of question two depreciation of 5% which had alternative convincing logical approach, its effect on the solution was equally less significant. A student could still score 18 marks out of 20 even if he got the depreciation wrongly calculated. Provision was however made to take care of the ambiguity by providing alternative marking scheme. There existed no sub-standard questions and all questions carried a reasonable marks according to the syllabus.

QUESTION ONE
a) Explain the following terms as used in standard costing. (3marks)
   i. Basic cost standards
   ii. Ideal standard
   iii. Currently Attainable standards
b) Evaluate FOUR (4) purposes of standard costing. (4marks)
c) Explain FOUR (4) problems associated with standard costing in today’s environment. (4marks)
d) Borga limited produces cocoa powder for cocoa beverage manufacturing companies. The management accountant has produced the following variance analysis information for management discussions.

   Actual sales
   Selling price       €225
   Sales volume 9000 units
   Variable cost      €170
   Standard cost:
   Selling price       €220
   Variable cost      €170
   Sales volume   10,000

40
Other variances have already been calculated as follows

<table>
<thead>
<tr>
<th>Variances</th>
<th>Direct cost variances:</th>
<th>GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material:</td>
<td>Price</td>
<td>22,250A</td>
</tr>
<tr>
<td></td>
<td>Usage</td>
<td>66,250A</td>
</tr>
<tr>
<td>Labour:</td>
<td>Rate</td>
<td>42,750A</td>
</tr>
<tr>
<td></td>
<td>Efficiency</td>
<td>33,750A</td>
</tr>
</tbody>
</table>

Manufacturing Overhead variances:

| Fixed overhead expenditure variance | 10,000F |
| Variable overhead expenditure variance | 12,500F |
| Variable overhead efficiency variance | 7,500A  |

The following additional information was extracted from the management accounts.

<table>
<thead>
<tr>
<th>GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeted net profit for the period</td>
</tr>
<tr>
<td>Actual profit</td>
</tr>
</tbody>
</table>

You have been asked as cost Accountant to reconcile the Budgeted profit to the actual profit using the variance report generated by the management accountant.

**Required:**

i. Calculate the sales variances  

ii. The total material variance  

iii. The Total wage variances  

iv. Total manufacturing overhead variances  

v. Reconciliation of Budget profit to the actual profit.  

*(Total=20 marks)*

**QUESTION TWO**

Brofre limited retails fertilizer to farmers in Ghana. The company has approached its Bankers to provide funding for next year's operations and three months master budget has been requested for review by the bankers.

You have been approached by the management as a consultant to prepare the 1st quarter budget for the banker's consideration for its next year's operations.

**End of Accounting year December 2014**

<table>
<thead>
<tr>
<th>GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debtors</td>
</tr>
<tr>
<td>Bank balance</td>
</tr>
<tr>
<td>Fixed asset at cost</td>
</tr>
<tr>
<td>Provision for depreciation balance</td>
</tr>
<tr>
<td>Creditors Balance</td>
</tr>
<tr>
<td>Operating expenses for the month December</td>
</tr>
<tr>
<td>Sales for the month of December 2014</td>
</tr>
<tr>
<td>December Ending inventory</td>
</tr>
<tr>
<td>Retained earnings</td>
</tr>
</tbody>
</table>
The following additional information was also provided to assist your work.

i) Depreciation is provided at the rate of 5% on cost of non-current assets

ii) Closing inventory is expected to increase by GHS 2000 in January from December levels. This is expected to increase by the same figure in February from the projected figure in January. It is expected that in March closing inventory is desired to be GHS 26,000

iii) The company makes a profit of 25% on its sales.

iv) Operating expenses is expected to increase by 10% from that of December and this is projected to increase at the same growth rate to March.

v) Sales is projected to grow by 15% from December until March.

vi) The Debtors figure is desired to be proportional to the sales values.

vii) Creditors value for the three months are expected to be as follows

   January - GHS 50,000; February – GHS 46,000 and in March – GHS 52,000

You are required as a consultant for Brofre Company limited to prepare for their Bankers

a) The budgeted income statement for the three months. (7 marks)

b) The budgeted statement of financial Position for the three months. (7 marks)

c) The cash budget for the three months. (6 marks)

(Total=20 marks)

**QUESTION THREE**

Obonku limited Produces Single, Double, and King size beds for sale to hotels in West Africa. Its manufacturing plant is located in Tema and currently producing at 100% capacity. Below is the annual output and sales for each product and the associated costs.

<table>
<thead>
<tr>
<th>Product</th>
<th>Single bed</th>
<th>Double bed</th>
<th>King Size bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units sold</td>
<td>5000 units</td>
<td>3,500 units</td>
<td>4000 units</td>
</tr>
<tr>
<td>Sales</td>
<td>2,500,000</td>
<td>2,800,000</td>
<td>3,800,000</td>
</tr>
<tr>
<td>Costs:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material cost</td>
<td>750,000</td>
<td>1,400,000</td>
<td>1,520,000</td>
</tr>
<tr>
<td>Labour costs</td>
<td>600,000</td>
<td>1,050,000</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Manufacturing O'head</td>
<td>200,000</td>
<td>650,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Administrative cost</td>
<td>200,000</td>
<td>100,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Total cost</td>
<td>1,750,000</td>
<td>3,200,000</td>
<td>3,220,000</td>
</tr>
<tr>
<td>Profit /Loss</td>
<td>750,000</td>
<td>(400,000)</td>
<td>580,000</td>
</tr>
</tbody>
</table>

The Director of Obonku is of the view that the product, Double bed is not doing well and must not be produced any longer. The following additional information has been provided.

i. 40% of the labour cost for all bed type are fixed costs.

ii. 50% of the manufacturing overhead is variable costs for all products.

iii. 80% of the administrative cost is fixed.
Alom hotel limited situated at Elimina has requested for 80 units of each bed and they are ready to procure them at the current prices. Obonku Ltd can only produce more if they increase production capacity in the short term at an additional cost of GHC80,000.
Assuming that costs and prices remain the same. You are required to:

a) Advice whether the company should shut down the production of Double beds. (10 marks)

b) Should the company accept the new order assuming double beds will still be produced? (10marks) (Total=20 marks)

QUESTION FOUR

a) What are the two most relevant costs for determining the Economic Order Quantity? Give THREE (3) specific examples in each case. (6 marks)
b) Examine the THREE (3) motives for Holding stocks (3 marks)
c) Explain Economic Order Quantity and discuss TWO (2) of its relevance. (3 marks)
d) Quaku Manu limited purchases and sells CDS. The company has been experiencing stock shortages and excess stocks at certain times in the year. The manager is concerned about the impact of overstocking and understocking and is therefore requesting you to assist in determining the most Economic quantity of CDS to order.
He has made the following information available to you to enable you recommend an appropriate stock to order and hold.

Sales per annum                                                                 20,000,000
Units of items sold                                                               200,000 units
Mark up on cost of purchases is 25% of purchase price
The ordering cost is GHS200 per order whilst holding cost per unit is 5% of unit price.

Required:

i) Determine the economic order quantity. (2 marks)
ii) What is the annual ordering cost? (2 marks)
iii) Determine the annual holding cost (2 marks)
iv) How many times in a year will the company order for goods? (1 mark)
v) What is the purchase value per order quantity? (1 mark) (Total=20 marks)

QUESTION FIVE

a) For any cost volume profit analysis to be valid, a number of important assumptions must reasonably be satisfied within the relevant range. As a management accountant for your organisation, evaluate any four assumptions that must be satisfied in cost-volume-profit analysis. (4 marks)
b) Anta Limited manufactures and sells Motor King to customers divided into High Quality, Medium Quality and Low Quality motor Kings and categories below:

<table>
<thead>
<tr>
<th></th>
<th>Sales Price GH¢</th>
<th>Involved Cost GH¢</th>
<th>Commission on Sales GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>High quality</td>
<td>3,400</td>
<td>1,200</td>
<td>80</td>
</tr>
<tr>
<td>Medium quality</td>
<td>2,300</td>
<td>1,080</td>
<td>60</td>
</tr>
<tr>
<td>Low quality</td>
<td>1,700</td>
<td>690</td>
<td>40</td>
</tr>
</tbody>
</table>

It is on record that sale quantities of Low Quality Motor King is twice compared to Medium and High Quality Motor Kings. Annual fixed cost of GH¢310,000 is expected to be incurred.

**GHC**

**You are required to:**

i. Compute the sales mix. **(1 mark)**

ii. Compute the unit contribution margin for each brand of Motor King **(4 marks)**

iii. Compute the weighted average unit contribution. **(4 marks)**

iv. Compute break even sales in volume and in sales. **(4 marks)**

v. How many motor kings should be sold to earn target profit of GH¢15,000? **(3 marks)** (Total=20 marks)

**SUGGESTED SOLUTIONS**

**QUESTION ONE**

a) i) **Basic cost standard** represents constant standard that are unchanged over long period. The main advantage of basic standard is that a base is provided for comparison with actual cost through a period of years with the same standard and efficiency trends can be established over time. When changes occur in the method of production, price levels or other relevant factors, basic standards are not very useful since they do not represent current target.

ii) **Ideal standards** – This represent perfect performance. Ideal standards are minimum cost that are possible under the most efficient operating condition. They are unlikely to be used because they may have negative impact on employee performance.

iii) **Currently attainable standards** – This standard represent those cost that should be incurred under efficient operating conditions. They are difficult but not impossible to achieve. Allowance are made for normal spoilage, machine breakdowns and idle cost.

b) **The purpose of standard costing** are:

i) Prediction of future cost that can be used for decision making.

ii) Provide a challenging target that can serve as a motivation for employee.

iii) Assist in setting target.

iv) Act as control device by highlighting exceptions

v) Simplifying the task of tracing cost to product for measuring profitability and inventory valuation.
c) **Problems of standard costing** in modern environment are
i) Variance analysis concentrates on only a narrow range of costs, and does not give sufficient attention to issues such as quality and customer satisfaction.
ii) Standard costing pays too much emphasis on direct labour cost. Direct labour is only a small proportion of cost in modern manufacturing environment and so this emphasis is not appropriate.
iii) Many of the variances in standard costing system focus on the control of short term variable costs. In modern manufacturing environment majority of cost including direct labour cost tends to be fixed in the short run.
iv) The use of standard costing relies on existence of repetitive operations and relatively homogeneous output. Nowadays many Organisation are forced continually to respond to customers' changing requirement, with the result that output and operations are not so repetitive.
v) Standard costing system were developed when the business environment was more stable and less prone to change. The current business environment is more dynamic and it is not possible to assume stable conditions.
vi) Standard costing system assumes that performance to standard is acceptable. Today’s business environment is more focused on continuous improvement.
vii) Most standard costing systems produce control statements weekly or monthly. The modern manager needs much more prompt control information in order to function efficiently in a dynamic business environment.

d) **i). Sales price variance**
   \[
   \text{(Actual contribution – standard contribution) x actual quantity} \\
   (\£55 - \£50) \times 9000 = \£45000F
   \]
   Sales volume variance
   \[
   \text{(Actual volume – standard volume) x standard contribution} \\
   (9000 - 10,000) \times 50 = 50000A
   \]
   Total sales variance
   Sales margin price variance \hspace{1cm} 45000F
   Sales margin volume variance \hspace{1cm} 50000A
   \[
   5000A
   \]

   **ii). Total material variance**
   Material price variance + material usage variance
   \[
   22,250A - 66,250A = 88,500A
   \]

   **iii) The total wage variance**
   Wage rate variance + labour efficiency variance = total wage variance
   \[
   \£42,750A + \£33,750A = \£76,500A
   \]

   **iv) Total manufacturing overhead variance**
   Fixed overhead expenditure variance + variable overhead expenditure + variable overhead efficiency variance.
   \[
   10,000F + 12,500F + 7,500A = 15,000A = 15000F
   \]
v). Reconciliation of budgeted profit to actual profit

<table>
<thead>
<tr>
<th></th>
<th>GH¢</th>
</tr>
</thead>
<tbody>
<tr>
<td>Budgeted net profit</td>
<td>200,000</td>
</tr>
<tr>
<td>Sales variances:</td>
<td></td>
</tr>
<tr>
<td>Sales margin price</td>
<td>45,000F</td>
</tr>
<tr>
<td>Sales margin volume</td>
<td>50,000A</td>
</tr>
<tr>
<td></td>
<td>5,000A</td>
</tr>
<tr>
<td>Direct cost variance:</td>
<td></td>
</tr>
<tr>
<td>Material price</td>
<td>66,250A</td>
</tr>
<tr>
<td>Material usage</td>
<td>22,250A</td>
</tr>
<tr>
<td></td>
<td>88,500A</td>
</tr>
<tr>
<td>Total wage variance:</td>
<td></td>
</tr>
<tr>
<td>Wage rate variance</td>
<td>42,750A</td>
</tr>
<tr>
<td>Labour efficiency</td>
<td>33,750A</td>
</tr>
<tr>
<td></td>
<td>76,500A</td>
</tr>
<tr>
<td>Total overhead variance</td>
<td></td>
</tr>
<tr>
<td>Fixed overhead expenditure variance</td>
<td>10,000F</td>
</tr>
<tr>
<td>Variable overhead expenditure variance</td>
<td>12,500F</td>
</tr>
<tr>
<td>Variable overhead efficiency Var</td>
<td>7,500A</td>
</tr>
<tr>
<td></td>
<td>15,000F</td>
</tr>
<tr>
<td></td>
<td>155,000A</td>
</tr>
<tr>
<td>Profit</td>
<td>45,000</td>
</tr>
</tbody>
</table>

**QUESTION TWO**

a)

**BUDGETED INCOME STATEMENT FOR BROFRE COMPANY LIMITED**

<table>
<thead>
<tr>
<th></th>
<th>DECEMBER</th>
<th>JANUARY</th>
<th>FEBRUARY</th>
<th>MARCH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SALES</strong></td>
<td>GHS</td>
<td>GHS</td>
<td>GHS</td>
<td>GHS</td>
</tr>
<tr>
<td></td>
<td>400,000</td>
<td>460,000</td>
<td>529,000</td>
<td>608,350</td>
</tr>
<tr>
<td><strong>OPENING STOCK</strong></td>
<td>20,000</td>
<td>22,000</td>
<td>24,000</td>
<td></td>
</tr>
<tr>
<td><strong>PURCHASES</strong></td>
<td>347,000</td>
<td>398,750</td>
<td>458,263</td>
<td></td>
</tr>
<tr>
<td><strong>COST OF GOODS AVAILABLE</strong></td>
<td>367,000</td>
<td>420,750</td>
<td>482,263</td>
<td></td>
</tr>
<tr>
<td><strong>LESS CLOSING STOCK</strong></td>
<td>22,000</td>
<td>24,000</td>
<td>26,000</td>
<td></td>
</tr>
<tr>
<td><strong>COST OF SALES</strong></td>
<td>345,000</td>
<td>396,750</td>
<td>456,263</td>
<td></td>
</tr>
<tr>
<td><strong>GROSS PROFIT</strong></td>
<td>115,000</td>
<td>132,250</td>
<td>152,088</td>
<td></td>
</tr>
<tr>
<td><strong>OPERATING EXPENSES</strong></td>
<td>60,000</td>
<td>66,000</td>
<td>72,600</td>
<td>79,860</td>
</tr>
<tr>
<td><strong>DEPRECIATION</strong></td>
<td>34,900</td>
<td>34,900</td>
<td>34,900</td>
<td>34,900</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td>100,900</td>
<td>107,500</td>
<td>114,760</td>
<td></td>
</tr>
<tr>
<td><strong>NET PROFIT</strong></td>
<td>14,100</td>
<td>24,750</td>
<td>37,327</td>
<td></td>
</tr>
</tbody>
</table>
### BUDGETED STATEMENT OF FINANCIAL POSITION

<table>
<thead>
<tr>
<th></th>
<th>DEC</th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GHS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NON CURRENT ASSETS</strong></td>
<td>698,000</td>
<td>698,000</td>
<td>698,000</td>
<td>698,000</td>
</tr>
<tr>
<td><strong>LESS DEPRECIATION</strong></td>
<td>98,000</td>
<td>132,900</td>
<td>167,800</td>
<td>202,700</td>
</tr>
<tr>
<td><strong>BOOK VALUE</strong></td>
<td>600,000</td>
<td>565,100</td>
<td>530,200</td>
<td>495,300</td>
</tr>
<tr>
<td><strong>CURRENT ASSETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STOCK</td>
<td>20,000</td>
<td>22,000</td>
<td>24,000</td>
<td>26,000</td>
</tr>
<tr>
<td>DEBTORS</td>
<td>23,000</td>
<td>26,450</td>
<td>30,418</td>
<td>34,980</td>
</tr>
<tr>
<td>CASH BALANCE</td>
<td>55,000</td>
<td>100,550</td>
<td>150,233</td>
<td>221,897</td>
</tr>
<tr>
<td>TOTAL</td>
<td>98,000</td>
<td>149,000</td>
<td>204,650</td>
<td>282,878</td>
</tr>
<tr>
<td><strong>TOTAL ASSETS</strong></td>
<td>698,000</td>
<td>714,100</td>
<td>734,850</td>
<td>778,178</td>
</tr>
<tr>
<td><strong>CURRENT LIABILITIES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CREDITORS</td>
<td>48,000</td>
<td>50,000</td>
<td>46,000</td>
<td>52,000</td>
</tr>
<tr>
<td>OWNERS CAPITAL</td>
<td>530,000</td>
<td>530,000</td>
<td>530,000</td>
<td>530,000</td>
</tr>
<tr>
<td>RETAINED EARNINGS</td>
<td>120,000</td>
<td>134,100</td>
<td>158,850</td>
<td>196,178</td>
</tr>
<tr>
<td><strong>capital plus liabilities</strong></td>
<td>698,000</td>
<td>714,100</td>
<td>734,850</td>
<td>778,178</td>
</tr>
</tbody>
</table>

**c)\[1.5\]**

<table>
<thead>
<tr>
<th></th>
<th>DI</th>
<th>DI</th>
<th>DI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH RECEIVED FROM DEBTORS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUTFLOW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAYMENT TO CREDITORS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OPERATING EXPENSES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL OUTFLOW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NET CASH FLOW</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BALANCE B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BALANCE C/D</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
However if a student depreciate the asset at 5 per the quarter divided by 3 to obtain 11,633 it should be accepted as a correct answer. This will affect profit, depreciation and accumulated depreciation.

**WORKINGS**

**DEBTORS**

<table>
<thead>
<tr>
<th></th>
<th>23,000</th>
<th>26,450</th>
<th>30,418</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALANCE B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADD SALES</td>
<td>460,000</td>
<td>529,000</td>
<td>608,350</td>
</tr>
<tr>
<td>LESS CLOSING DEBTORS</td>
<td>-26,450</td>
<td>-30,418</td>
<td>-34,980</td>
</tr>
<tr>
<td>CASH RECEIVED</td>
<td>456,550</td>
<td>525,033</td>
<td>603,787</td>
</tr>
</tbody>
</table>

**CREDITORS**

<table>
<thead>
<tr>
<th></th>
<th>48,000</th>
<th>50,000</th>
<th>46,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>BALANCE B/F</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADD PURCHASES</td>
<td>347,000</td>
<td>398,750</td>
<td>458,263</td>
</tr>
<tr>
<td>LESS CLOSING DEBTORS</td>
<td>-50,000</td>
<td>-46,000</td>
<td>-52,000</td>
</tr>
<tr>
<td>CASH PAID</td>
<td>345,000</td>
<td>402,750</td>
<td>452,263</td>
</tr>
</tbody>
</table>

**QUESTION THREE**

a) Calculation of contribution that will be lost if Double bed cease production

<table>
<thead>
<tr>
<th></th>
<th>GHC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential loss of Revenue</td>
<td>2,800,000</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Potential savings of material cost</td>
<td>1,400,000</td>
</tr>
<tr>
<td>Potential savings in variable labour cost 60% x 1,050,000</td>
<td>630,000</td>
</tr>
<tr>
<td>Potential savings in variable manufacturing overhead 50%x650,000</td>
<td>325,000</td>
</tr>
<tr>
<td>Potential savings in variable administrative costs 20%100,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Total potential savings in variable cost</td>
<td>2,375,000</td>
</tr>
<tr>
<td>Potential contribution to fixed cost that will be lost</td>
<td>425,000</td>
</tr>
</tbody>
</table>

From this calculation it implies that a contribution of GHC425,000 will be lost if double bed production ceases. Profit will decline by this figure since fixed cost component will still be incurred. Therefore the company should continue production.

Student who approach it the long way to achieve a profit reduction of GHC425,000 should be awarded the full marks as shown below.
### ALTERNATIVELY

**INCOME STATEMENT**

<table>
<thead>
<tr>
<th></th>
<th>Single Beds GHC</th>
<th>Double Beds GHC</th>
<th>King Size Beds GHC</th>
<th>total GHC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SALES</strong></td>
<td>2,500,000.00</td>
<td>2,800,000.00</td>
<td>3,800,000.00</td>
<td>9,100,000.00</td>
</tr>
<tr>
<td><strong>MATERIAL COST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>750,000.00</td>
<td>1,400,000.00</td>
<td>1,520,000.00</td>
<td>3,670,000.00</td>
</tr>
<tr>
<td><strong>LABOUR COST</strong></td>
<td>600,000.00</td>
<td>1,050,000.00</td>
<td>1,200,000.00</td>
<td>2,850,000.00</td>
</tr>
<tr>
<td><strong>M O'HEAD</strong></td>
<td>200,000.00</td>
<td>650,000.00</td>
<td>300,000.00</td>
<td>1,150,000.00</td>
</tr>
<tr>
<td><strong>ADMIN</strong></td>
<td>200,000.00</td>
<td>100,000.00</td>
<td>200,000.00</td>
<td>500,000.00</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>1,750,000.00</td>
<td>3,200,000.00</td>
<td>3,220,000.00</td>
<td>8,170,000.00</td>
</tr>
<tr>
<td><strong>PROFIT</strong></td>
<td>750,000.00</td>
<td>(400,000.00)</td>
<td>580,000.00</td>
<td>930,000.00</td>
</tr>
</tbody>
</table>

### INCOME STATEMENT

<table>
<thead>
<tr>
<th></th>
<th>SB (GHS)</th>
<th>REMAINING(GHS)</th>
<th>KSB(GHS)</th>
<th>TOTAL(GHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SALES</strong></td>
<td>2,500,000.00</td>
<td>3,800,000.00</td>
<td>6,300,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>MATERIAL COST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>750,000.00</td>
<td>1,520,000.00</td>
<td>2,270,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>LABOUR COST</strong></td>
<td>600,000.00</td>
<td>420,000.00</td>
<td>2,220,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>M O'HEAD</strong></td>
<td>200,000.00</td>
<td>325,000.00</td>
<td>825,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>ADMIN</strong></td>
<td>200,000.00</td>
<td>80,000.00</td>
<td>480,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>1,750,000.00</td>
<td>825,000.00</td>
<td>5,795,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>PROFIT</strong></td>
<td>750,000.00</td>
<td>(825,000.00)</td>
<td>505,000.00</td>
<td></td>
</tr>
</tbody>
</table>
In this case profit reduced from GHC 930,000 to GHC 505,000 a reduction of GHC425,000

b) Income statement for 80 units of each product

<table>
<thead>
<tr>
<th></th>
<th>Single bed</th>
<th>Double bed</th>
<th>King Size bed</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GHC</td>
<td>GHC</td>
<td>GHC</td>
<td>GHC</td>
</tr>
<tr>
<td>Sales</td>
<td>(500x80)40,000</td>
<td>(800x80)64,000</td>
<td>(950x80)76,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Mat</td>
<td>(150x80)12,000</td>
<td>(400x80)32,000</td>
<td>(380x80)30,400</td>
<td>74,400</td>
</tr>
<tr>
<td>Lab</td>
<td>(80x72) 5,760</td>
<td>(180x80)14,400</td>
<td>(180x80)14,400</td>
<td>34,560</td>
</tr>
<tr>
<td>Man</td>
<td>(80x20) 1,600</td>
<td>(80x92.86)7,428.57</td>
<td>(80x 37.5)3,000</td>
<td>12,028.57</td>
</tr>
<tr>
<td>Admin</td>
<td>(80 x 8 ) 640</td>
<td>(80x5.71) 457.14</td>
<td>(80x10) 800</td>
<td>1,897.14</td>
</tr>
<tr>
<td><strong>Total variable cost</strong></td>
<td>20,000</td>
<td>54,285.71</td>
<td>48,600</td>
<td><strong>122,885.71</strong></td>
</tr>
<tr>
<td>Contribution</td>
<td>20,000</td>
<td>9714.29</td>
<td>27,400</td>
<td>57,114.29</td>
</tr>
<tr>
<td>Less incremental FC</td>
<td></td>
<td></td>
<td></td>
<td>80,000</td>
</tr>
<tr>
<td><strong>Loss on order</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>22,885.71</strong></td>
</tr>
</tbody>
</table>

The order should be rejected because it will result in incremental loss of GHS 22,885.71 unless shalom is ready to pay higher price to copy the additional cost associated with producing the extra units.

**QUESTION FOUR**

a) The relevant cost for determining the EOQ are the **holding cost** and the **ordering cost**.

**The Holding cost** includes:

i. -opportunity cost of investment in stock

ii. -incremental insurance cost.

iii. -incremental warehouse and storage cost

iv. -incremental material handling cost.

v. -cost of obsolescence and deterioration of stock.

**The ordering cost includes:**

i. -Clerical cost of preparing purchase order purchase order

ii. -Receiving deliveries

iii. -paying invoices

b) The **three motives** for holding stock.

i. **Transaction motive** - this occurs whenever there is a need to hold stocks to meet production and sales requirement and that it is not possible to meet this requirement instantaneously.

ii. **The precautionary motive** – If a firm decides to hold an additional amount of stock to cover the possibility that it may have underestimated its future production and sales requirement or when the supply of raw materials may be unreliable because of uncertain event affecting the supply of raw materials this is called precautionary motive for requiring stock.
iii. Speculative motive – When it is expected that future inputs prices may change, a firm might maintain higher or lower levels of stock to speculate on the expected increase or decrease in future prices. Quantitative models does not take into consideration the speculative motives, but management should be aware that optimum stock levels do depend to a certain extent on expected price movement. If input prices is expected to rise then management should stock to take advantage of input price savings.

a) Economic order quantity – this is the ordering quantity where total cost of holding and ordering cost is at its minimum. It is the most economical quantity to order in order to minimize both incremental holding cost and ordering cost.

Relevance of Economic Order Quantity

- It is relevant in the sense that it is the optimal quantity that ensure optimal use of resources.
- It is also relevant because it will assist to ensure that there will be minimal occurrence of stock out and excessive holding of stock with its associated consequence like inability to satisfy customers, deterioration and high rate of losses due to overstocking.

\[
EOQ = \sqrt{\frac{2 \times D \times O}{H}}
\]

Where D represents annual demand
O represents cost per order
H represents holding cost per units

But holding cost is 5% of the unit purchase price which is unknown therefore we need to determine the purchase cost

- Selling price = sales/units = 20,000,000/200,000 = GHC 100
- MARK UP is 25% on cost therefore X + 0.25X = 100
  X(1+0.25) = 100
  X = 100/1.25 = GHC 80
Therefore purchase price per unit is GHC 80
Holding cost per unit = 5% x 80 = GHC 4

\[
EOQ = \sqrt{\frac{2 \times 200,000 \times 200}{4}} = 4,472
\]

ii. ANNUAL ORDERING COST = 200,000/EOQ X 200 = GHC 8,945
200,000/4,472 X 200 = GHC 8,945

iii. EOQ/2 X HOLDING COST PER UNIT = 4,472/2 X 4 = 8,945
iv. The number of times in a year the company have to order.
Annual demand / EOQ
200,000/4472 = APPROX 45 times

v. EOQ X PURCHASE PRICE
4472 X 80 = GHC 357,760

QUESTION FIVE
i) The behavior of total revenue is linear. This implies that the price of the product or service will not change as sales volume varies within the relevant range.

ii) The behavior of total expenses is linear over the relevant range. This implies expenses can be categorized as fixed, variable or semi-variable. Total fixed expenses remain constant as activity changes, and unit variable expenses remains unchanged as activity varies. Secondly, the efficiency of the production process and workers remain constant.

iii) In multi-product organizations the sales mix remain constant over the relevant range.

iv) In manufacturing firms, the inventory at the beginning and end of the period are the same.

This means unit produced are all sold.

b) 

i. Sales mixed = 2: 1: 1
50%:25%:25%

ii. Unit contribution: Sales vc
Contribution: High = (3,400 – 1,200 + 80) = 1,120 x 0.25 = 530
Medium = (2,300 – 1,080 + 60) = 1,160 x 0.25 = 290
Low = (1,700 – 690 + 40) = 970 x 0.50 = 485
Contributions-weighted 1,305
iii. Break even  
\[
\text{FC} = \text{GHC} 310,000 = \frac{310,000}{1,305} = 238 \\
\]
In proportion of High = 59.5 = 60  
Medium = 60  \quad \text{Low} = 119

Break even in sales value

<table>
<thead>
<tr>
<th>Product</th>
<th>Units</th>
<th>Sales Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>60</td>
<td>GHC 204,000</td>
</tr>
<tr>
<td>Medium</td>
<td>60</td>
<td>GHC 138,000</td>
</tr>
<tr>
<td>Low</td>
<td>119</td>
<td>GHC 202,300</td>
</tr>
</tbody>
</table>

Total sales = GHC 544,300

iii. \[\text{FIXED COST + PLANNED PROFIT} = \frac{310,000}{1,305} = 249\]

- **HIGH**: 0.25 \times 249 = 62
- **MEDIUM**: 0.25 \times 249 = 62
- **LOW**: 125 \times 249 = 125

Alternative Solution that must be accepted

i. Sales mix = 4 : 1 : 1  
\[66.67\% : 16.67\% : 16.67\%\]

ii. Sales VC

- **High**: (3,400 - 1200 + 80) = 2120 \times 0.1667 = 353
- **Medium**: (2,300 - 1080 + 60) = 1160 \times 0.1667 = 193
- **Low**: (1700 - (690 + 40)) = 970 \times 0.6667 = 647

iii. Weighted average contribution = 1,193

iv. Break-even point in sales = \[\frac{\text{fixed cost}}{\text{weighted average contribution}} = \frac{310,000}{1,193} = 260\]

<table>
<thead>
<tr>
<th>Product</th>
<th>Units</th>
<th>Sales Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>43</td>
<td>GHC 146,200</td>
</tr>
<tr>
<td>Medium</td>
<td>43</td>
<td>GHC 146,200</td>
</tr>
<tr>
<td>Low</td>
<td>174</td>
<td>GHC 295,800</td>
</tr>
</tbody>
</table>

Total sales = GHC 588,200

v. \[\text{UNITS AT PLANNED PROFIT} = \frac{\text{FIXED COST + PLANNED PROFIT}}{\text{WEIGHTED AVERAGE CONTRIBUTION}} = \frac{310,000 + 15000}{1193} = 272.42 = 272\]

<table>
<thead>
<tr>
<th>Product</th>
<th>Units</th>
<th>Sales Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>182</td>
<td></td>
</tr>
</tbody>
</table>
A good number of students scored above 15-20 marks in question 1, 4, and 5, however most students performed poorly in question three the budget question. This may be due to the fact that these questions were much clearer in content than question two and three. An average number score almost 10 in question 2a and zero in 2b again emphasizing lack of clarity or understanding of the subject areas namely relevant cost analysis, and decision accounting.

This clearly shows that students lack knowledge in basic costing techniques and the concepts of relevant data/information, and opportunity cost concepts. Students also lacked the ability to identify and isolate relevant cost that affects a decision to accept additional orders. This led to general failure of student to pass question three b.

Student should also study well to understand how to prepare quarterly budget using their costing knowledge and be able to derive missing figures where necessary.

In question five, most student were unable to calculate the multiproduct approach to breakeven analysis, also signifying that they have not covered breakeven analysis in detail.

Students were clearly not prepared in topics such as multiproduct breakeven analysis, computation of mark up when profit percentage is given on cost but selling price can be derived, whilst cost per unit is not available in the question. This simple calculation made students failed woefully in the (d) part of question five as well. In all marks allocated were reasonable and question content in terms of load was also reasonable.