# **BUSINESS MANAGEMENT**

# **QUESTION 1**

Business organizations are influenced by both internal and external environmental factors.		
(a)	What is business environment?	
		(3 marks)
(b)	Explain three (3) elements of the external environment of the business	organization.
		(9 marks)
(c)	Give two (2) reasons why the knowledge of management is important	?
		(8 marks)
		(Total: 20 marks)
QUES	STION 2	
Poor p	lanning often leads to low or poor performance.	
(a)	Explain the four (4) main functions involved in a planning an activity.	(10 marks)
(b)	What is meant by decision-making?	
		(2 marks)
(c)	What four (4) barriers can hinder effective decision-making?	(8 marks)
		(Total: 20 marks)

(a) Explain Organization Structure. (2 marks)

(b) Explain four (4) factors that affect an Organization Structure (8 marks)

(c) Describe five (5) techniques a manager can use to motivate his staff.

(10 marks)

(Total: 20 marks)

# **QUESTION 4**

Any business organization which does not control the activities of its employees and departments is likely to have difficulties.

(a) Identify and describe four (4) Control techniques used in an organization.

(10 marks)

(b) Explain the Trait Theory of Leadership.

(4 marks)

(c) Explain three (3) sources of power available to a manager.

(6 marks)

(Total: 20 marks)

# **QUESTION 5**

(a) Organizational Change means an alteration of the status quo in an organization. Explain five (5) reasons why employees may resist a Change in an organization.

(10 marks)

(b)	Identify and explain five (5) reasons why communication may not be effective in an organization.	
		(10 marks)
	(Total	: 20 marks)
QUES	STION 6	
Humar Manag	n Resource Planning is one of the key functions performed by the Human Resource.	urce
(a)	What is Human Resource Planning?	(2 marks)
(b)	Explain any four (4) activities involved in Human Resource Planning.	
		(8 marks)
(c)	Describe four (4) objectives of training and development in an organization.	(10 marks)
	(Total	: 20 marks)
QUES	STION 7	
(a)	Explain the term Breakdown Maintenance.	(2 marks)
(b)	Give four (4) reasons why organizations undergo periodic maintenance?	(8 marks)
(c)	Differentiate a commodity market from a consumer market.	(4 marks)
(d)	Explain (3) three factors that inform the pricing of a product or service.	(6 marks)

#### **BUSINESS INFORMATION SYSTEM**

#### SECTION A: COMPULSORY

# Read the following scenario carefully and answer ALL the questions based on the scenario

#### **SCENARIO**

Bongo Rural Bank has been operating without computers. Their transactions with other banks have been with many challenges because of the Bank's manual operations.

Management of Bongo Rural Bank set some funds aside to procure computers and other office equipment to help with their computerization move.

An IT professional was engaged to help. He suggested that, computers purchased must have the latest Operating Systems, good and fast Central Processing Unit (CPU), large Random Access Memory (RAM) and a UPS for each computer. He also suggested that Bongo Rural Bank should purchase a broad-based multi-user banking software. The IT professional wanted an off-the-shelf software, as he was not interested in bespoke software for the Bank. He further advised that computers purchased should be networked to each other to form a Local Area Network (LAN). The specialist suggested that the computers bought should be used as work stations. Two high capacity Servers should also be acquired for the network.

The Specialist had his last meeting with management of the Bank and discussed various principles of hardware and software maintenance such as preventive, corrective, adaptive and perfective maintenance activities. The discussion was really educative.

#### Required:

Answer the following questions based on the scenario:

#### **QUESTION 1**

- (a) The IT professional was engaged to help with the computerization project. He suggested that computers purchased must have the latest Operating Systems, good and fast Central Processing Unit (CPU) and large enough Random Access Memory (RAM).
  - i. What is an Operating System? (2 marks)
  - ii. State Six (6) functions of an Operating System. (6 marks)

- (b) The IT professional wanted an off-the-shelf software, as he was not interested in Bespoke Software for the Bank.
  - i What is Off-the-self Software?

(2 marks)

ii. State Three (3) differences between a Bespoke Software and off-the-shelf Software.

(6 marks)

(c) The computers purchased should be networked to each other to form a Local Area Network (LAN).

Describe briefly two types of Local Area Network (LAN).

(4 marks)

(Total: 20 marks)

# **QUESTION 2**

(a) The topology (or configuration) of a network refers to the logical layout or shape of the network. It describes the manner in which the various component computers are physically connected.

Describe THREE (3) LAN topologies and suggest which one will be the most appropriate for the bank.

(12 marks)

(b) The key features of system maintenance are flexibility and adaptability. System maintenance is necessary because the system should cope with the changes in user procedures or volume of business. The specialist mentioned at his last meeting with Management of the Bank, various principles of maintenance.

Describe in detail the following activities:

- i. Corrective Maintenance
- ii. Perfective Maintenance
- iii. Adaptive Maintenance
- iv. Preventive Maintenance

(8 marks)

#### **SECTION B:**

# Answer any THREE questions from the following

# **QUESTION 3**

Controls entail the processes adopted to ensure that an organization adapts successfully to its changing environment.

(a)	List the four basic components in a Control System and briefly describe	e each of them.
		(12 marks)

(b) A computer network may be defined as an interconnection of a number of computers and other shared devices. Explain in detail the following network categories:

# **QUESTION 4**

(a) Feedback is the return of results from a system to serve as input back to the system.

What is feedback control? (2 marks)

(b) Explain the following:

i. Positive Feedback (3 marks)

ii. Negative Feedback (3 marks)

iii. Feed- forward Control (3 marks)

(d) Computers fall into a number of categories. Name **THREE** of the categories and describe them.

(9 marks)

"A system is a bounded set of interrelated activities that together constitute a single entity" (Olsen, 1968).

a) Using a sated example, explain how a business firm behaves as a system.

(8 marks)

b) What is meant by a subsystem exhibiting sub-optimality?

(4 marks)

c) Information is regarded as a key resource for organization and in other to assess or test the value of information, one would have to ask a few question. List and explain briefly, FOUR (4) questions that you would ask to determine the value of information.

(8 marks)

(Total: 20 marks)

# **QUESTION 6**

(a) For the bank to determine the interest rate to be paid by customers, KIKA Rural Bank Ltd. has a biometric register for all its customers. The customers who want to collect loans are taken through a verification process. They will show their registration card with their registration numbers (VERno) on the cards to an official of the bank. The identity of the customer is verified using a verification machine. If the verification goes through and his VERno is less than 200, he is to pay an interest of 3% for his loan. If the VERno is greater than or equal to 500, he is to pay 10% interest on his loan. When the proposed customer's verification does not go through, he is not a customer and he is given a VERno and asked to pay 15% interest on his loan for any VERno given.

## Required:

Prepare a limited entry decision table for the system of the bank above.

(15 marks)

(b) State FIVE benefits of a Programme Flowchart.

(5 marks)

(a) Computer Aided Systems (Software) Engineering (CASE) tools are automated software tools that support the drawing and analysis of system models and associated specification.

# Explain:

- i. Upper CASE tools
- ii. Lower CASE tools

(4 marks)

(b) List FOUR components of CASE and describe their functions.

(12 marks)

- (c) The first step in providing an effective security programme is that all levels of management must become aware of the importance of Information Management and its consequences. Explain the following terms:
  - i. Encryption
  - ii. Data Information Backup.

(4 marks)

# FINANCIAL ACCOUNTING FUNDAMENTALS

# **QUESTION 1**

Kweku, Yaw and Baah are in partnership, sharing profit and losses in the ratio 5:3:2 respectively. The statement of financial position for the partnership as at 31st December, 2010 is as follows:

GH¢	$\mathbf{GH}\mathbf{\mathfrak{e}}$	$\mathbf{GH}\mathbf{\mathfrak{e}}$
		50,000
		32,500
		12,350
		94,850
	1,637	
	3,530	
	40,000	
	45,167	
15,650		
	(21,865)	23,302
	<del>.</del> ,	118,152
		(15,000)
		103,152
		40,000
		30,000
		<u>25,000</u>
		95,000
	5,555	
	4,640	
	<u>(2,043</u> )	8,152
		103,152
	15,650 6,215	1,637 3,530 40,000 45,167 15,650 6,215 (21,865)

On 31<sup>st</sup> December, 2010, due to a misunderstanding between the partners, Yaw decided to quit the partnership and Kweku and Baah decided to continue with the partnership sharing profits and losses in the ratio 3:2. The following issues were also agreed upon by the partners.

- 1. One of the vehicles was given to Yaw in part payment at a valuation of GH¢11,250. His loan account will remain with the partnership.
- 2. The office building and hydraulic plant were valued at GH¢60,000 and GH¢15,000 respectively.
- 3. GH $\phi$ 1,000 of the Receivables was considered bad and an allowance of GH $\phi$ 1,753 is to be made for doubtful debts.
- 4. The profit or loss on revaluation should be transferred to the Current Account.

#### Required:

Prepare the Statement of Financial Position of Kweku and Baah Partnership after considering the above issues.

(20 marks)

## **QUESTION 2**

(a) State two objectives of Branch Accounting.

(2 marks)

(b) Osabarima Ltd. has its Head Office in Accra and a branch in Kumasi. All goods are either purchased or manufactured by the Head Office and sent to the branch at cost plus 25%.

Sales by the Branch are either on cash or credit basis. Mr. Andrews Atinga, the Kumasi Branch Manager is entitled to 10% of net profit of the branch after charging such commission. The Branch Manager maintains the branch's own Sales Ledger as well as Cash book and all other accounting records are kept by the Head Office.

The following balances relating to the branch were extracted from Head Officer Ledger at the end of the year ending 31/12/2010.

un une end er une yeur endang er, 12, 2010.	GH¢'000
Cash Sales	5,920
Credit Sales	4,600
Cash Received from Receivables	3,960
Bad Debts	800
Discount allowed	52
Rents and Rates	360
Branch Managers Salary	408
Returns to Head Office	700
Branch Inventory 1/1/2010	1,500
31/12/2010	1,040
Branch Receivables 1/1/2010	840
Goods sent to Branch at Invoiced price	10,920

Any difference on the Stock Account should be regarded as abnormal loss.

# Required:

# Prepare:

- i. Branch Inventory Account
- ii. Goods Sent to Branch Account
- iii. Branch Receivables Account
- iv. Branch Adjustment Account
- v. Branch Income Statement

(18 marks)

- (a) Distinguish among Depreciation, Amortization and Depletion. (5 marks)
- (b) Explain each of the following:
  - i. Business Entity Concept
  - ii. The Dual Aspect Concept
  - iii. The Accrual Concept
  - iv. Accounting Basis
  - v. Accounting Policies

(15 marks)

The following Financial Statements were for two companies for the year 31 December, 2011

	COMPANY A		COMPANY B	
	GH¢	$\mathbf{GH} \mathbf{c}$	GH¢	GH¢
Income Statement:				
Sales		650,000		850,000
Less Cost of Sales		<u>480,000</u>		<u>570,000</u>
Gross Profit		170,000		280,000
Less Total Expenses		50,000		90,000
Net Profit		<u>120,000</u>		210,000
Statement of Financial Position:				
Non-current Assets				
Property Plant & Equipment at Cost		350,000		470,000
Less Depreciation		40,000		80,000
		310,000		390,000
Current Asset	50,000		00.000	
Inventory	50,000		90,000	
Accounts Receivable	130,000		140,000	
Bank	40,000	<u>220,000</u>	<u>25,000</u>	<u>255,000</u>
Total Asset		530,000		645,000
Current Liabilities				
Accounts Payable		(90,000)		(115,000)
Net Assets		<u>440,000</u>		<u>530,000</u>
Financed By:				
Capital		320,000		320,000
Net Profit		<u>120,000</u>		<u>210,000</u>
		<u>440,000</u>		<u>530,000</u>

Note: Opening Inventory: Company A GH¢80,000, Company B GH¢70,000.

Required:

**QUESTION 4** 

- (a) Calculate the following ratios for each company.
  - i. Net Profit to Sales percentage
  - ii. Current Ratio
  - iii. Inventory Ratio
  - iv. Acid Test Ratio
  - v. Return on Capital Employed (ROCE) Based on Net Assets.

(20 marks)

Y XL Ltd. is a manufacturing Company. The following is an extract from the Company's books.

	GH¢
Inventory of Raw materials	300,000
Purchased of Raw materials	400,000
Returns outwards (raw materials)	20,000
Manufacturing wages	400,000
Office salaries	280,000
Discount allowed	50,000
Inventory of finished goods	130,000
Carriage Inwards	24,000
Print of stationaries	56,000
Rent and Rates	160,000
General expenses	260,000
Travelling expenses	168,000
Discount received	100,000
Sales	2,000,000

You are also supplied with the following additional information:

- 1. Depreciation of 10% is to be charged on Plant and Equipment worth GH¢200,000.
- 2. The following are on hand at 31/12/2011:

	$\mathbf{GH} \mathfrak{e}$
Raw materials Inventory	160,000
Finished goods Inventory	150,000

3. Rent and rates are to be apportioned as follows:

Factory	50%
Office	50%

# Required:

- (a) Prepare the Manufacturing Account
- (b) Prepare the Income Statement Account
- (c) Calculate the Net Profit as a percentage of the manufacturing cost.

(20 marks)

## **ECONOMICS**

## **SECTION A (MICRO ECONOMICS)**

# **NB:** Answer only three (3) questions in the section

# **QUESTION 1**

(a) The table below shows the price and quantity demanded at each price for a new cell phone in a hypothetical economy.

Price GH¢	Quantity	Price Elasticity Co-efficient
100	30	-
90	40	X
80	50	1.89
70	60	1.36
60	70	Y
50	80	0.73
40	90	z

(a) Calculate the total revenue at each price.

(3 marks)

(b) Use the arc (midpoint) elasticity formula to calculate the price elasticity co-efficient when price changes from:

i.	GH¢100	to	GH¢90
ii.	GH¢70	to	GH¢60
iii.	GH¢50	to	GH¢40

(4 marks)

- (c) Which of the three price ranges in (b) above has:
  - i. Elasticity demand
  - ii. Inelasticity demand
  - iii. Unitary elasticity

(6 marks)

(d) What relationship can be observed between the total revenue and price elasticity co-efficient as the price changes from GH¢100 to GH¢40?

(5 marks)

(e) Analyze the effect of a decrease in supply of cement on the price of cement blocks. Illustrate your answer with diagrams.

(2 marks)

(Total: 20 marks)

# **QUESTION 2**

(a) Explain the following concepts:

i. Increasing returns to scale
 ii. Decreasing returns to scale
 (4 marks)
 (4 marks)

(b) The data below shows a hypothetical long-run production functions. Use the information in the table to answer the questions that follow:

<b>Units of Labour</b>	<b>Units of Capital</b>	<b>Total Product</b>	
1	2	20	
2	4	60	
3	6	120	
4	8	200	
5	10	250	
6	12	300	
7	14	320	
8	16	330	

Capital and Labour are obtained on a perfectly competitive market at  $GH \not \in 500$  and  $GH \not \in 100$  per unit respectively.

#### Calculate:

i. The cost of labour and capital at each level of output. (4 marks)

ii. The total cost at each level of output. (4 marks)

iii. The average cost at each level of output. (4 marks)

(a) Define equilibrium price.

(2 marks)

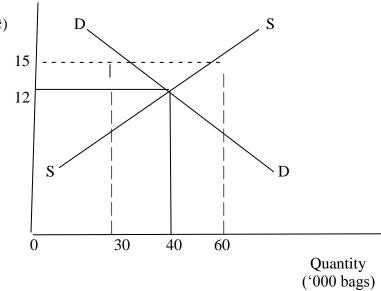
(b) Distinguish between minimum and maximum price controls.

(4 marks)

(c) The diagram below shows the demand and supply curves for maize, a staple food in a country. In order to encourage maize farmers to increase production, the government imposes a minimum price of GH¢15 for a bag of maize.

Answer the questions that follow:





i. Calculate the total revenue of maize farmers before the imposition of the minimum price.

(2 marks)

ii. Calculate the excess supply of maize after the minimum price.

(2 marks)

iii. Suppose the government does not buy the surplus, determine the total revenue of the maize farmers.

(3 marks)

iv. Comparing the situation in (i) and (iii) above, are the maize farmers better off or worse off? Explain.

(3 marks)

(d) Explain any two (2) measures that the government can take to clear the excess supply.

(4 marks)

- (a) With the aid of appropriate diagrams, explain:
  - i. Demand pull inflation
  - ii. Cost-push inflation

(16 marks)

(b) The Ghanaian government statistician has announced that the rate of inflation has fallen from 13.5% to 9.5%. What will be the impact of this event on the average price level in Ghana?

(4 marks)

(Total: 20 marks)

# **SECTION A (MICRO ECONOMICS)**

# NB: Answer only two (2) questions in the section

## **QUESTION 5**

(a) Define consumption function.

(3 marks)

(b) Write an equation that establishes the relationship between consumption and disposable income, defining all the terms in the equation.

(5 marks)

(c) Explain any four (4) determinants of consumption expenditure.

(12 marks)

(Total: 20 marks)

# **QUESTION 6**

(a) Outline reasons why countries engage in foreign trade.

(4 marks)

(b) Explain any **four** (4) benefits that a nation can derive from foreign trade. (16 marks)

(a) What is:

(i) Fiscal policy (3 marks)

(ii) Government budget

(3 marks)

(b) The table below shows the budget estimate of a hypothetical economy. Study the table and answer the questions that follow:

Items of Government Expenditure GH¢'million		Items of Government Receipts GH¢'millions	
Workers' emoluments	480	Taxes on international trade	340
New school buildings	220	Excise duties	90
Fuel and maintenance of Vehicles and bungalows	110	Pay-as-you-earn	125
Rural electrification	300	Sale of government assets	95
Rehabilitation of major Clinics	160	Taxes on self-employed	40
Maintenance of law and order	180	Grants (mainly from abroad)	180

i. List and calculate items of capital or development expenditure. (3 marks)

ii. What is the value of indirect taxes? (3 marks)

iii. Calculate the value of direct taxes as a percentage of **total tax** revenue.

(4 marks)

iv. What is the budget surplus or deficit for the fiscal year? (4 marks)

# THE INSTITUTE OF CHARTERED ACCOUNTANTS [GHANA]

#### **BUSINESS MANAGEMENT**

#### **NOVEMBER 2013 SOLUTIONS**

## **QUESTION 1**

(A) A business environment is made up both internal and external factors that influence every aspect of a business organization. Some of the factors are economic, socio-cultural, political and legal.

#### (B) Elements of the External Business Environment

- (i) The political environment of a business is one of its external environment. The political system includes a government's policies and its attitudes towards business. The political environment also defines what goods and services the government wants to be provided. Political decisions therefore affects business activities.
- (ii) Technological environment is another aspect of a business' external environment. This includes methods, approaches and techniques that are used in the production of goods and services. New technologies come with new demand for goods and services. Some of the new technologies are computer games, online shopping and bar coding. Technology is important to business as it can assist them to reduce, cost and create innovations.
- (iii) The social environment of the business refers to the values, beliefs, traditions among others. The social system of a community have a considerable influence on how a business operates. The change in social trend therefore determines which product or service will be demanded.
- (iv) Factors in the economic environment of a business also influences its activities. The survival or otherwise of a business depends on its external environment. The economic factors are made up of economic conditions and economic policies.
- (v) Legal environment is made up of legal conditions in which a business has to operate. Legal changes therefore affect business behavior.

# (C) Importance of Management

- Management enables the organization to arrange the factors of production needed and also organize resources required for production to take place. Such knowledge assists the organization to coordinate, direct and control its resources thereby reducing and avoiding waste.
- (ii) The knowledge obtained from the study of management enables it to use all its resources productively. Management therefore ensures efficient use of scarce resources by deciding on the most efficient possible use of all its resources. It therefore combines skills and knowledge of its members for proper use of resources.
- (iii) Management ensures that there are well defined roles in the organization. The advantage of this is that, it leads to reduction and avoidance of conflicts. By performing this function, management ensures the establishment of a good organization as well as jobs are clear to both superiors and subordinates.
- (iv) Another importance of the knowledge of management is that it enables the organization to be a going concern. This objective is reached as organisations by their managerial activities are able to determine the changes in their environment and adapt accordingly to the changes in demand

#### **QUESTION 2**

#### (A) Functions Involved in Planning

Planning in organisations is important as a result of the functions it performs. Note the following:

- (i) Managerial Performance: Planning in an organization is important because it has positive effects on managerial performance, Organisations that plan earn very high performance because planning provides a strategic direction as to what is expected from top management to achieve specific organizational objectives.
- (ii) Reducing Risk: Planning in organisations facilitates the reduction of risks. As organisations increase in size so does their risks and the only way the organization can reduce or manage this risk is through planning.
- (iii) Sense of Purpose: Planning can give a sense of purpose to the personnel in the firm leading to an improved quality of management and it can encourage creativity and initiative by tapping the ideas of the management team.
- (iv) Quality Decisions: A well- prepared plan developed after analysis of internal and external factors, risks and uncertainties is in the long term best interest of the firm because better quality decisions will be made and management control can be better exercised.

(v) Minimising Friction: Planning on organizations facilitates the minimization of friction among departments, sections and individuals. This is because, with each knowing the overall corporate objectives, each will understand and contribute towards the achievement of such objectives.

## (B) Decision Making

Decision making is the process of selecting a logical choice from available alternatives. Using this one has to consider the positive and negative aspects of each alternatives. After the selection of choice, resources have to be committed to a future course of action.

# (C) Barriers to Decision Making

- (i) Complacency: This is where the decision maker either does not see danger signs or opportunity or ignores data from the environment that would affect decision making.
- (ii) Defensive Avoidance: With this the decision maker denies the importance of danger or opportunity or the responsibility for taking action.
- (iii) Panic: This is where the decision maker adopts adhoc measures to take the final decision. Such approach will rarely produce any good results.
- (iv) Inadequate Information: In situations where the manager or the decision maker does not have substantive, accurate and adequate information to enhance his/her decision, the final decision will lack credibility.

#### **QUESTION 3**

(A) *Organization structure* is the framework within which an organization averages its lines of authority, communication and through it's allocate activities and responsibilities. It also spells out the extent to which roles, power and duties are coordinated and controlled. It also determines how information flows in the organization.

## **(B)** Factors that affect Organization Structure

(1) A factor that influence the structure of an organization is the size of the organization. The bigger or larger the organisation, the more complex its structure becomes. Such an organization will have a more formal structure. Tasks and duties also become more specialized and there is a creation of detailed rules and regulations.

- (2) The structure of an organization is also influenced by its strategy. The strategy that it pursues as differentiation or cost leadership will require a structure that would assist it to reach its objectives. Thus the structure of the organization has to fit its strategy.
- (3) The type of organization structure is influenced by the type of activity or product or technology used in the organization. For example the increase in the use of technologies like internet and computers has made some organisations become virtual organisations. It is now possible for an organization to become more decentralized due to the ease of information flows.
- (4) The type of employers of the organization also influences is structure whereas more experienced and skillful staff need less supervision leading to a flat structure. The use of more unskilled staff will call for a different structure.
- (5) The legal status of the organization influences its structure whereas a sole trade type of business has a simple structure, a limited liability company has a more complex structure due to the various functions that need to be undertaken.

# (C) Techniques of Motivating Staff

- (1) A means to motivate staff is to give staff competitive salaries and bonus. Competitive Salaries is a major factor in motivating and retaining key members of staff.
- (2) Giving recognition to a task well done is another means to motivate staff.

  Recognition from management is an appreciation for that achievement.

  Once a staff is appreciated he or she is conditioned to perform or exhibit such behaviours.
- (3) Training is a tool used for motivation. Training provides staff members an opportunity to acquire skills and knowledge needed for effective and efficient performance. Training can be carried out either by internal or external trainers.
- (4) Employees are motivated to work better when they are certain of the potential ahead of them. These potentials are found in a clear career path. To motivate staff managers have to set career paths within their organisations.
- (5) A good working environment is a means used to motivate staff. A good environment requires that the offices are well ventilated. The office furniture are the right size and very comfortable. The general working

conditions have to make staff very comfortable and provide for their safety on the job.

(6) The kind of leadership in the organization can either motivate staff or not. Leadership that delegates authority, grows staff by allowing them to develop themselves by assigning them roles that allows them to prove themselves are motivating staff.

## **QUESTION 4**

# (A) I. Control Techniques Used in Organisations

A budget is a statement of expected results or requirements expressed in financial or numerical terms for a specific period of time. Budgets are used as a control technique by expressing plans, objectives and programmes of the organization in numerical terms.

The organisation can use different types of budgets like revenue and expense budget to provide details for revenue and expense plan for a period. Again cash budgets can be used to forecast cash receipts and disbursements for a period. External audits

ii. Audit

This is a method of control that normally involves financial matters and also can include other areas of the firm. Audits can be conducted by either internal or external personnel. External audits are normally done by outside accountants and are limited to financial matters. The key purpose of audit is to certify that the organisation's accounting methods and procedures are fair, consistent and conform to the existing accounting /financial practices.

iii. Break Even Charts (BEC).

BEC depicts graphically the relationship of volume of operations to profits. The Break Even Point (BEP) is the point at which sales revenue exactly equal expenses.

The key purpose of BEC as a control tool is to show the breakeven point and the effects of changes in output.

iv. Output Control

This is based on the measurement of outputs. It is used as a control measure by tracking production records and monitoring sales figures to enable the organization identify where discrepancies have occurred and the necessary measures put in place.

# [B] The trait theory of leadership

Leadership is basically defined as the ability to influence the behavior of others. The trait theory of leadership assumes that every effective leader should possess certain traits, features or characteristics. These traits are supposed to enable a leader to perform effectively. Some of the traits identified are optimism, charisma, assertiveness, empathy and integrity. These traits are innate but can also be learnt

#### [C] Sources of Power

- (1) A source of power for a manager is legitimate power. This is the power that stems from the formal position or status of the manager in an organization. This power that the manager has enables him or her to influence behavior. People at higher levels in the organization have the power over the people below them. Thus they are in a position to give instructions.
- (2) Referent power is when a manager can influence behavior due to the attraction that his subordinates have for him. With this source of power subordinates are prepared to do or carry out any task that the manager assigns to them.
- (3) Expert power, a source of power for a manager is based on ne believing in a given field. Due to this belief subordinates for example are ready to do anything they are told to. The manager therefore is believed to have expert knowledge or skills that are important for the job.
- (4) Coercive power is based on the manager having control over what happens in the organization. Due to this influences behaviour with penalties or sanctions when subordinates do not do what is required of them. Privileges, verbal abuse, delays in promotion and job losses.

## **QUESTION 5**

## [A] Five (5) reasons for resistance to change

- (1) A reason why people resist or fight a change is when the reason or the need for the change is unclear. This is especially the case when workers strongly believe that the present ways of doing things works very well for them.
- (2) People fight change when they, as the end-users of the change, have not been consulted or when they are not sure of the benefits or advantages that the new change will bring. A way out is to put in place a good communication system. When people are informed they tend to have higher levels of job satisfaction.
- (3) Workers in an organization are connected to the correct system of work. During their daily activities at the work place workers form special groups. Due to their parochial self-interest as an interruption of their social relations, people will fight against the change being introduced.

- (4) Another reason why workers or people will fight any change is the fear of the unknown. Managers have to accept that proposed changes generate fears and anxiety. For example the introduction of new technologies creates uncertainty for staff especially if they have not been trained adequately to handle these technologies.
- (5) People will resist or fight change when they think that the new change will come with work overload. Work overload creates fatigue for staff. A way out of this is to reward staff if there is work overload. Also managers will have to praise workers who are able to deal with this load.
- (6) People will resist or fight change when they feel the new change will make them lose their status or quality of life. For example a change that will result in collapsing two departments into one implies a loss of status to one of the departmental heads. Such people are likely to fight the change as it is contrary to their interest.

## [B] Five (5) reasons for ineffective communication

- (1) A reason for ineffective communication in an organization is information overload. People at the work place are faced with a lot of information each day. It is therefore important to control the flow of this information. If this is not done one is likely to misinterpret or overlook very key information.
- (2) Another reason for ineffective communication is that at times one does not pay attention to what is being communicated. Thus when one is for example engaged in his or her work, he or she may not get the key points of an issue being explained. This may create problems between the manager and his or her subordinates.
- (3) Another reason why communication may not be effective is that there may be noise, interference or distractions. These noise may be as a result of cars blowing their horns during the transmission of the information. Other noise are psychological noise made up of fear.
- (4) One reason why communication becomes ineffective is that one may not seek for clarification for the fear of being see as unwise. Instead of seeking for clarification some communicators pretend to have understood what is communicated to them. At this can result I very negative consequences for the organization.
- (5) One common reason for ineffective communication is that instead of paying attention to what is being said one assumes that his or her ideas are the most important to what is being said. A key disadvantage of this is that one does no learn new ideas and also alienate those you are working with.

(6) Emotional state of a person also may interfere with the communication process. Due to different social systems some words are not accepted to certain people. Such words are emotional when they are used during communication a well-intended argument may be understood wrongly. Hostility between people can also create emotional barriers to communication.

## **QUESTION 6**

# [A] Human Resource Planning

It is the process of linking the management of staff to the mission and goals of the organization. A key objective of human resource planning is to ensure that the organization gets the right number of people with the right skills, experience and competencies in the right positions at the right time. Human resource planning therefore serves as an analysis of the current and future needs of the organization.

# [B] Four (4) activities in Human Resource Planning

- (i) One of the activities of human resource planning is for the managers to align the objectives of the organisations with its human resource needs. The manager would therefore have to determine the structure that would enable the organization to meet its objectives. He or she does this by creating job positions and defining what jobs need to be undertaken
- (ii) Another activity is for the manager to undertake a human resource audit of the organization or his/her department. This is done to find out the composition of existing human resource in terms of quantity, skills, age, sex, distribution and experience.
- (iii) The next activity is for the manager to determine the gross human resource requirements for the period under review. Based on information obtained in the human resource audit, the manager would be able to come up with a position of the existing human resource and the future needs.
- (iv) The manager as part of his or her human resource planning would have to determine the net human resource requirement for the period under discussion. This is done by finding the difference between the human resource audit and the gross estimates.
- (v) Another activity in human resource planning is the preparation of plans to enable the organization meet its human resource needs. The plan will spell out what

needs to be achieved during activities such as training, recruitment, selection and career development.

# [C] The objectives of training and development

- (1) One objective of training and development is to help employees to develop their personal and organizational skills, knowledge and abilities. For the human resource department one of its core duty is to enhance the superior workforce sot that they can assist the organization to achieve its goals effectively and efficiently. By this their staff become competitive in the market.
- (2) Another objective of training and development is to help improve on performance deficiencies of both staff and the organization. Staff performance deficiencies are revealed through the staff annual appraisals. When these deficiencies are corrected staff become competitive and more productive.
- (3) Training and development can be used to motivate and retain staff. When staff are trained or developed they either refresh or enhance their knowledge. This increases their morale as they are prepared to take up more responsibilities at the workplace. This improves the morale of staff and satisfy their need for achievement.
- (4) Another objective of training and development is to prepare the organization for change. A reason why staff resist change is when they are not well prepared to handle any change. As change is a necessary condition for every organization, managers will have to train ad develop their staff.
- (5) Another objective of training and development is to expose staff to new trends in the industry. In the current work environment technology demands that new skills and knowledge required for effective performance are learnt regularly. It is through the means of training and development that these are acquired.

## **QUESTION 7**

## [A] Meaning of breakdown maintenance

Breakdown maintenance is the repairs or replacements performed or made to a machine after it has failed to perform to restore it to its functional state.

# [B] Importance of maintenance

(1) An important role of maintenance in an organization is that, regular maintenance assist the organization to avoid unexpected breakdown and also a reduction in the

daily fire fighting approaches to production. The availability of the maintenance plan assists the organization to plan for the type of spare parts needed and on time.

- (2) A key importance of periodic maintenance is that it ensures that all equipment and machinery needed or required for production operate efficiently. Through the regular inspections, cleaning and making minor adjustments, faults/problems may be corrected before they become a major problem. Such major problems can lead to the shutdown of production lines.
- (3) Maintenance is important for an organization because it impacts on its profitability. For example when an equipment begins to wear, it may result in the production of sub-standard products which will be rejected by clients. Thus the wear and tear of the machines affects productivity and product quality.
- (4) Maintenance when carried out helps to keep the equipment in better condition. When this is done the equipments or machines life span is prolonged. This enables the organization to derive the maximum benefits from the machine. The goal of value for money is therefore achieved.
- (5) Another importance of maintenance in the organization is that it enhances the safety of working condition. An unsafe condition will likely lead to accidents at the workplace, resulting in expensive legal action and costs against the organization.

## [C] Two (2) types of markets

- (1) A commodity market is combination of sellers and buyers dealing with a product. Most commodity markets deal with products from the primary sector. Examples of such markets are coffee beans, cocoa and diamonds.
- (2) Consumer markets deal with final customers of products. It refers to all those who buy products for their personal use or direct consumption or for household use. Consumer products found on such markets can either be convenience or specialty products.

# [D] Three (3) factors for pricing

- (1) A factor influencing the price of a product is the cost of raw materials. Raw materials are the inputs for production and they are the overriding factors that influence the price of a product.
- (2) The price that an organization will charge for a product or service is influenced by the market in which it operates. In a monopolistic market the seller can charge higher prices as customers may not have substitutes. In a perfect competition market due to the availability of many sellers and buyers, a seller cannot charge a

very high price.

- (3) Another factor that influences the price of a product is its nature. The nature of the product refers to its unique features. For example when such a product is made available to clients, it becomes a branded good which attracts some value. The producer therefore charges above average price for such products.
- (4) In the production and supply chain are some intermediaries. These assist the producers to get their products to the final consumers. For their services they have to be paid. This margin is passed on to the consumer in the form of higher price. Examples of intermediaries are wholesales, retailer and brokers.

# THE INSTITUTE OF CHARTERED ACCOUNTANTS [GHANA]

#### **BUSINNESS INFORMATION SYSTEMS**

#### **NOVEMBER 2013 SOLUTIONS**

## **QUESTON 1**

A

- i. An operating System (OS) is the resident executive software that the computer needs to make it operational. It is a type of system software that acts as interface for application software, hardware and the user. Earlier examples likes MS-DOS, windows 9.5 as well as OS/2 belong to the single-user group.
- ii. Functions performed by the Operation System:
  - Booting-Loads the OS into computer's main memory and uses diagnostic routines to test the system for equipment failure. Stores the Basic Input Output System (BIOS) programs in main memory.
  - Checking that the hardware functions properly.
  - House-keeping tasks-Display disk space available; displays information about operating system version.
  - Managing files-Copies files/programs from one medium to another. Renames files, backs up files/programs.
  - Maintaining directories in backing storage.
  - Controlling peripheral devices.
  - Maintaining system security.
  - Handling system interrupts.
  - Managing multitasking and multiprogramming.

**B**]

- i. Off-the-shelf is a software that is developed for a user either in-house or by an external programmer or software company. It is often written to perform jobs for which there might be no readily available packaged software.
- ii. Differences between bespoke and off-the-shelf software.
  - Bespoke software is developed in-house or externally for a specific organisation.
  - Off-the-shelf developed generically not for any particular organisation.

- Off-the-Shelf is not developed due to a particular request by an organisation.
- Bespoke software has a longer implementation time-scale than off-the-shelf software.
- Bespoke software tends to be more expensive than off-the-shelf software.

**C**]

- A client/server LAN consist of requesting PC, called client and devices that provide a service called server. The clients are connected to the file server through a switch. There are different kinds of servers, depending on the tasks they perform.
- A peer-to-peer LAN is one in which all the PC's on the network communicate directly with each other and there is no server. This is less expensive than the client/server type and is quite effective for up to 25(twenty-five) PC's; beyond this number, the network tends to slow down and is quite ineffective.

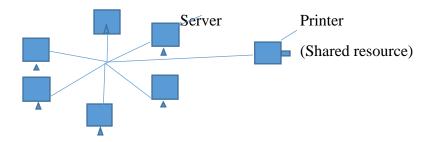
#### **QUESTION 2**

# A] Three network topologies

The topology or configuration of network refers to the logical layout or shape of the network. It describes the manner in which the various components are physically connected.

#### i. Star Network

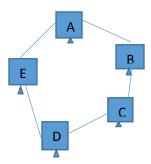
On a star network all the PC's and other communication devices are connected to a central (Controlling) computer, which may be referred to as a server. This is a typical example of a client/server LAN. No client is allowed to communicate directly with other clients. The server monitor the flow of traffic. The advantages are that the server prevents collisions of messages and also if a connection is broken between any communication device and the server, the rest of the devices on the network will continue to function. The main disadvantage is that a breakdown of the server renders the network inoperative.



Star Network Topology

#### ii. Ring or Loop Network

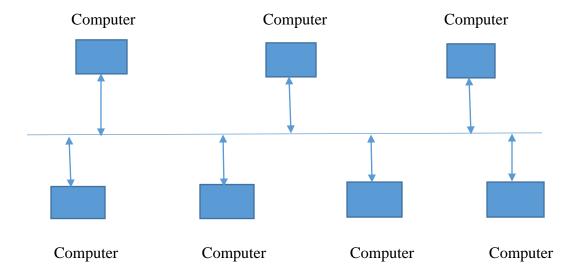
In a ring network all the PC's and other communications devices are connected in a continuous loop. This is a typical peer-to-peer LAN. There is no server. Messages flow in only one direction and there is, therefore no danger of collisions. However, if a connection is broken, the entire network may stop working. A node, intending to send information, is required to be allocated a 'bit token' (1 or 0) indicating permission to send the information or otherwise.



#### iii. Bus Network

In a bus LAN all the communication devices are connected to a common channel. If a connection is broken the network may stop working. This type of network structure may be organised as client/server or peer-to-peer network. A signal from any communications device move in both directions to the ends of the bus.

Any imminent collisions of messages are deleted by the protocol, Carrier Sense Multiple Access/Collision detection (CSMA/CD).



Out of these 3 alternatives the bank's operations would be facilitated best with a star network so that a central server could store the database and all the programs required by staff who would be able to access them from their various operational points.

**Corrective Maintenance** - Carried out in response to a problem. Its objective is to ensure that systems remain operational. It is an expensive process and the design and implementation process of any system should try to minimise the need for corrective maintenance.

- Perfective Maintenance Carried out in order to perfect the software or to improve software
  so that the processing inefficiencies will be eliminated and performance enhanced. It often
  consists of making enhancements requested by users to improve or extend the facilities
  available as well as improve efficiency or effectiveness.
- Adaptive maintenance Required to take account of anticipated changes in the processing environment, e.g. user information needs may change, organisational structure may be altered or legislative changes may impose new obligations on the software.
- **Preventive Maintenance** Carried out in advance of a problem occurring in order to reduce the risk of that problem. In theory, more preventive maintenance means less corrective maintenance.

## **QUESTION 3**

#### $\mathbf{A}$

# Four Components

- (i) Standard
- (ii) Sensor
- (iii) Comparator
- (iv) The corrector or effector

#### i. Standard

This enables control to be exercised. A standard is a statement of the desired output or performance level from the system that is being controlled. For example, in an electric pressing iron the setting of the thermostat to the required temperature provides the standard by which comparisons can be made with the actual temperatures and necessary adjustment made to the heat source.

#### ii. Sensor

This measures the output or performance of the system being controlled and sometimes records it.

## iii. Comparator

This is the means by which the comparison of actual and required results is made.

#### iv Corrector or effector

This is the most important part of the system, and is the means by which judging by the results of the comparison corrective action is initiated. In a management information system, the corrector or effector will normally be the manager.

# **B**] Categories

# i. Wide Area Network (WAN)

A wide Area network (WAN) is a computer network that covers a broad area (ie. Any network whose communications links cross metropolitan, regional, or national boundaries. The largest and most well-known example of a WAN is the internet.

# ii. Metropolitan Area Network

A metropolitan Area Network (MAN) is a network that connects two or more local area networks or campus area networks together but does not extend beyond the boundaries of the immediate town or city. Routers, switches and hubs are connected to create a metropolitan area network.

#### iii. Local Area Network

Requires installation of their own communication channels, whether by the use of wires or wireless. A local Area Network consist of a communications link, network operating system, PCs, servers and other shared hardware devices like printers, scanners and storage devices all connected within a small geographical area.

### **QUESTION 4**

#### $\mathbf{A}$

Feedback control is the measurement of differences between planned outputs and actual outputs realised and the modification of subsequent action and/o plans to achieve future expected results.

The signal received by a system from the environment and transmitted through the feedback loop may be classified as either positive or negative, depending on a comparison between the expected and the actual results.

#### **B**]

Positive feedback, negative feedback and feed-forward control.

i. Positive Feedback-If the result received from the environment matches what is expected, there is a 'positive feedback', affirming that the relationship between the system and its environment is normal and no corrective response is required.

A positive feedback tends to result in control action that causes actual results to maintain their paths of deviation from planned results. It may also result in the original plan being changed.

- ii Negative Feedback-Results that do not match the expected level or type of outputs and will always require some form of corrective action are termed as negative feedback.
- iii. Feed-forward Control-A more sophisticated control mechanism relies on feed-forward Controls. Under this approach, the objective is compared with predicted outcomes. This makes it possible for anticipatory control actions to be taken to reduce any deviation. It requires an appropriate predictive model to enable the forecast to be made.

Unlike feedback control which measures and reports actual historical results so that control action can be taken, where necessary, feed-forward control is based on trying to anticipate what will happen in the future and attempting to match this anticipated outcome with the planned outcome.

# **C**] Categories of Computers

#### Introduction

Computers fall into a number of categories as detailed below, and organisations are required to select the most appropriate category depending on their needs.

#### **Supercomputers**

These are the biggest in size (hence referred to as 'monsters'), most expensive, most complex and hence, the most difficult to handle among all the classes of computers. They constitute the type that individual organisations cannot justifiably acquire.

They are reserved for national assignments, wars, weather research and in rare cases, certain types of games. (For instance, some years ago IBM manufactured a supercomputer they called Deep Blue to play chess against the then world chess champion).

### **Mainframe Computers**

The mainframe is generally far smaller than the supercomputer in terms of physical size, cost, computing power and complexity and is used mainly by medium-and large-sized organisations, especially those engaged in complex number-crunching and batch-processing jobs.

In Ghana, a couple of organisations including the Controller and Accountant-General's Department, use mainframe computers.

#### **Minicomputers**

The minis are next in line after the mainframe. Currently these two are becoming so small in physical size that there is only a thin line of difference between them.

Like the mainframes, the minis are mostly used by those companies that are engaged in batch processing jobs.

# **Microcomputers**

Also called the personal computer (PC). This comes in various-sizes-the workstation, desktops, laptops and palmtops. They happen to be the smallest in physical size, most inexpensive, and least complex of the family of computers.

## **QUESTION 5**

### **A**]

The business firm is made up of sub-systems that are both inter-dependent and inter-related. A number of different divisions and departments, functional and processing units interplay to achieve the corporate objectives. For instance, the finance division interacts with the production and marketing departments in ensuring that a typical production firm will be able to attain its objectives.

Relevant system elements of inputs, processes, outputs environments to be mentioned in the answer.

#### **B**1

Each sub-system has its functions clearly spelt out and these must be carried out in agreed ways to achieve specified objectives.

If any individual sub-system attempts to function only to achieve and/or maximise its objectives to the detriment of other sub-system(s) that subsystem will be said to be exhibiting sub-optimality (or sub-optimisation).

#### $\mathbf{C}$

Relevant questions to be asked will include:

- Who uses the information?
- What is it used for?
- How often is it provided but not used?
- What is achieved by its use?
- Are there alternatives to this source of information?

- When is it provided?
- What methods are used to obtain the information?

A.

#### **RULES**

	1	2	3	4
CUSTOMER	Y	Y	Y	N
HAS VER no				
200< = VER no <	Y	N	N	-
500				
VER no > = 500	N	Y	N	-
PAY 3% INT.			X	
PAY 5% INT.	X			
PAY 10% INT.		X		
PAY 15% INT.				X

# B]

- Benefits of flow chart
- Quicker grasp of relationship
- Effective analysis- they facilitate understanding of the program
- Effective synthesis-relationships can be grouped to bring out more meaning about the system
- Effective communication-as part of the documentation of the program they help the users to understand the program better.
- Facilitate Proper program documentation Effective coding-used as blueprint for the program coding
- Effective coding- Used as blueprintfor the Program coding.
- Orderly debugging and testing of program.

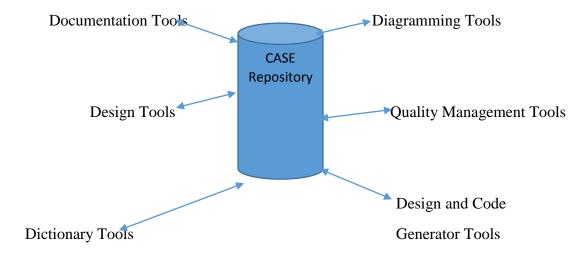
# **QUESTION 7**

### $\mathbf{A}$

i. The tools that address the first part of the SDLC (requirement analysis and data modelling) are called upper case tools (or Analysts' workbenches, or front end tools)

ii. Those tools which concentrate on the latter part of the SDLC (design and implementation) are called lower case tools (or programmers' workbenches, or back end tools).

# B] 4 Components of CASE and functions.



- Diagramming Tools-used to draw the system models required.
- Dictionary Tools- used to record, delete, edit and output detailed documentation and specification.
- Design Tools- used to develop system prototypes.
- Quality Management-analyse system models, descriptions and specifications and designs for completeness, consistency and conformance accepted rules of the methodologies.
- Documentation Tools-required for project and system documentation.
- Design and Code Generator Tools- automatically generate database design and application programs.

**C**]

### i. Encryption

This is the technique of disguising information in order to preserve its confidentiality during transmission and when stored. The process of encryption and decryption comprises the use of an algorithm and a key.

The algorithm is the operation itself which transforms the data into cipher and key controls the algorithm. Changing the value of the key can alter the effect of the algorithm so that the conversion for each key value is completely different.

ii. In information technology, to back up data refers to making copies of data so that these additional copies may be used to restore the original after data loss event. These additional copies are typically called 'backups'. Backups are useful primarily for two purposes. The first is to restore a system to its original form following a disaster (called disaster recovery).

The second is to restore small numbers of files after they have been accidentally deleted or corrupted. Data loss is also very common.

# THE INSTITUTE OF CHARTERED ACCOUNTANTS [GHANA]

# FINANCIAL ACCOUNTING FUNDAMENTALS

# **NOVEMBER 2013 SOLUTIONS**

# **QUESTION 1**

# PARTNERS CAPITAL ACCOUNT

	Kweku GH¢	Yaw GH¢	Baah GH¢		Kweku GH¢	Yaw GH¢	Baah GH¢
Motor Vehic	ŕ	11,250	J	Bal b/d	40,000	30,000	25,000
Bank		26,359		Partners 0	Carried a/c	7,609	
Bal C/d	40,000	-	25,000				
	40,000	37,609 =====	25,000 ====		40,000	37,609 =====	25,000 =====
				Bal b/d	40,000	-	25,000

# REVALUATION ACCOUNT

	GH¢		GH¢
Receivable – bad debt	1,000	Office building	10,000
Provision for doubtful debts	1,753	Hydraulic Plant	2,650
Partners curried account: Share of Profit:			
Kweku 5/10x9897	4,949		
Yaw 3/10x9897	2,969		
Baah 2/10x9897	1,979		
	12,650 =====		12,650 =====

# KWEKU & BAAH PARTNERSHIP BALANCE SHEET AS AT 31 DECEMBER 2010

	GH¢	$\mathrm{GH}\mathfrak{e}$	
<b>Non-Current Assets</b>	GIIÇ	GIIţ	
Office building		60,000	
Hydraulic plant		15,000	
Vehicle		<u>21,250</u>	
C		96,250	
<b>Current Assets</b>			
Inventory	1,637		
Receivables less provision	777	16055	
Cash & Bank	<u>13,644</u>	<u>16,055</u>	
		<u>112,305</u>	
Capital & liabilities			
Capital Account:			
Kweku		40,000	
Baah		<u>25,000</u>	
		65,000	
<b>Current Account:</b>			
Kweku	10,504		
Baah	<u>(64)</u>	<u>10,440</u>	
		75,440	
Liabilities:		,	
Payables	15,650		
Other Owings	6,215		
Loan from Yaw	<u>15,000</u>	<u>36,865</u>	
		<u>112.305</u>	

# PARTNERS CURRENT ACCOUNT

	Kweku GH¢	Yaw GH¢	Baah GH¢		Kweku GH¢	Yaw GH¢	Baah GH¢
Bal b/d			2,043	Bal. b/d	5,555	4,640	
Capital		7,609		Revaluatio a/c profit	n 4,949	2,969	11,979
Bal. c/d	10,504			Bal. c/d			64
	10,504	<u>7,609</u>	2.043		10,504	<u>7,609</u>	<u>2,043</u>
Bal. b/d			64		10,504		

# **QUESTION 2**

# **Objectives of Branch Accounting**

- a) It helps in ascertainment of the profits or loss made by the branch.
- b) It ensures proper control of the Branch.

# **BRANCH ADJUSTMENT ACCOUNT**

	GH¢		GH¢
Accrual Loss	160,000	Bal. b/f	300,000
Returns to Head Office	140,000	Branch a/c Stock	2,184,000
Gross profit	1,976,000	Stock	2,104,000
Bal. c/d	208,000 2,484,000		
		Bal. b/d	2,484,000 208,000

# **BRANCH DEBTORS**

	GH¢		GH¢
Bal. b/d	840,000	Cash	3,960,000
Credit Sales	4,600,000	Bad Debts	800,000
		Discounts	52,000
		Bal. c/d	628,000
	5,440,000	1	5,440,000
Bal. b/d	======= 628,000		=====
-	BRANCH STOCK II	NVENTORY ACCOUNT	
	GH¢		GH¢
		Credit Sales	4,600,000
Bal. b/f	1,500,000	Cash Sales	5,920,000
Goods sent to Branch	10,920,000	Differences Abnormal Losses	160,000
		Return to Head Office	700,000
		Bal. c/d	1,040,000
Bal. b/d	12,420,000 1,040,000	1	12.420.000
	GOODS SENT TO	BRANCH ACCOUNT	
	GH¢		GH¢
Returned to Head Office	560,000	Branch Stock	8,736,000
Trading	8,176,000		
	8,736,000		8,736,000

# OSABARIMA LTD, KUMASI BRANCH BRANCH INCOME STATEMENT ACCOUNT

	$\mathbf{GH}\mathbf{\mathfrak{e}}$	GH¢
Branch Profit		1,976,000
Rent & Rates	360,000	
Wages & Salaries	408,000	
Bad Debts	800,000	
Discount allowed	52,000	<u>1,620,000</u>
Net profit before Commission		356,000
Managers Commission (10 x 356,000)	356,000	32.364
Net Profit		323,636

# **QUESTION 3**

**a. Depreciation** is the continuous fall or loss in the value of fixed assets due to wear and tear and passage of time. It is the systematic allocation of the depreciable amount of an asset over its useful life e.g. Property, Plant and equipment.

**Amortization** is the provision for the fall in value or consumption of intangible assets such as lease, patent, copyright and goodwill.

**Depletion** is the process of calculating or providing for the fall in the value of wasting asset such as mines, oil wells and quarries.

# **b(i)** Business Entity Concept

This concept states that accounting information relates to the activities of the business only and not to the activities of its owners. The business should be viewed as a separate entity completely divorced from the owners. Therefore only business transactions must be recorded in the books of accounts of the business.

### (ii) The Dual Aspect Concept

This is the central underpinning of accounting as practiced today. This concept states that every change in one element of an entity is accompanied by another change of a

similar magnitude but in an opposite direction. Every business transaction, there are always two parties involved and accounting system must be designed to record these twofold aspects of transaction. The principle underlies the basis of double entry bookkeeping. It also ensures that accounting equation and the statement of the financial position are always in a balance.

# (iii) Accrual Concept

The is concept states that revenue should be included in the account when earned rather than when money is received and that cost should be included when incurred rather than when paid. It is not necessarily correct that cash received or paid during an accounting period represent time revenue or expenditure. The accrual concept recognizes change in a variety of assets and liabilities in determining period net income and not just cash changes.

### (iv) Accounting Bases

These are the methods developed for applying fundamental accounting concepts to financial transactions and items for the purpose of financial accounts and in particular for determining the accounting period to which revenue and cost should be recognized in the income statement and for determining the amounts at which material items should be stated in the statement of financial position.

# (v) Accounting Policies

These are specific accounting bases selected and consistently applied or followed by a business enterprise as being in the opinion of the management appropriate to its circumstances and best suited to present finding its results.

### **QUESTION 4**

			Onipa Ye Bad	Suro Onipa
(i)	Net Profit x 100 Sales	=	120,000 x 100 650,000	210,000 x 100 850,000
		=	<u>18.5%</u>	<u>24.7%</u>
(ii)	Current Asset Current Liabilities	=	<u>220,000</u> 90,000	225,000 115,000
		=	<u>2.44:1</u>	<u>2.22:1</u>

(iii)	Cost of Sales Average Inventory		$\frac{480,000}{(80,000+50,000)2}$	<u>570,000</u> (70,000 + 90,000) 2
	=	=	<u>7.4 tims</u>	<u>7.1 tims</u>
(iv)	Current Assets - Inventor Current Liabilities	<u>ory</u>	220,000 + 50,000 90,000	225,000 - 90,000 115,000
	=	=	<u>1:1.89</u>	<u>1:1.43</u>
(v)	Net Profit x 100 Net Assets		120,000 x 100 (440,000)	210,000 x 100 (530,000)
	=	=	<u>27.2%</u>	<u>39.6%</u>

A]
YXL LTD.
MANUFACTURING ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 2011

	$\mathbf{GH} \mathbf{c}$	$\mathbf{GH} \mathfrak{c}$
Raw materials:		
Inventory (1/1/11)		300,000
Add Purchases		400,000
Add Carriage Inwards		24,000
		724,000
Less Return Outwards		20,000
		704,000
Less Inventory (31/12/11)		160,000
Cost of materials used		544,000
Manufacturing wages		<u>400,000</u>
Prime Cost		944,000
Add Factory overheads:		
Rent and Rates (50% @ 160,000)	80,000	
Dep. of Plant & Equipment	<u>20,000</u>	<u>100,000</u>
Production Cost to Income Statement	Account	1,044,000

# YXL LTD. INCOME STATEMENT ACCOUNT TO THE YEAR ENDED 31/12/2012

	$\mathbf{GH} \mathfrak{e}$	$\mathbf{GH} \mathbf{c}$
Sales		2,000,000
Less Cost of Sales		
CP Inventory	130,000	
Add Production Cost from Man. a/c	1,044,000	
	1,174,000	
Less Closing Inventory	150,000	1,024,000
Gross Profit		976,000
Discount Received		100,000
		1,076,000
Less Expenses		
Office Salaries	250,000	
Discount Allowed	50,000	
Print & Stationery	56,000	
Rent & Rates (50% x 160,000)	80,000	
Travelling	168,000	
General Expenses	<u>260,000</u>	<u>894,000</u>
Net Profit		<u>182,000</u>

**C**]

# YXL LTD. NET PROFIT AS A PERCENTAGE OF MANUFACTURING COST

= Net Profit x 100 Manufacturing Cost

 $= \underbrace{182,000}_{1,020,000} \times 100$ 

= 17.84%

# THE INSTITUTE OF CHARTERED ACCOUNTANTS [GHANA]

#### **ECONOMICS**

#### **NOVEMBER 2013 SOLUTIONS**

# **QUESTION 1**

 $\mathbf{A}$ 

**B**]

$$\frac{Q_1 - Q_0}{(Q_1 + Q_0)/2} / \frac{P_1 - P_0}{(P_1 + P_0)/2}$$

(i) 
$$\frac{40-30}{(40+30)/2} \sqrt{\frac{90-100}{(90+100)/2}} = \frac{10}{35} \sqrt{\frac{10}{95}} = \frac{10}{35} \times \frac{95}{10} = 2.714$$

(ii) 
$$\frac{70-60}{70+60)/2} \sqrt{\frac{60-70}{(60+70)/2}} = \frac{10}{65} \sqrt{\frac{10}{65}} = \frac{10}{65} \times \frac{65}{10} = 1.0$$

(iii) 
$$\frac{90 - 80}{(90 + 80)/2} / \frac{40 - 50}{(40 + 50)/2} = \frac{10}{85} / \frac{10}{45} = \frac{10}{85} \times \frac{45}{10} = 0.5294$$

 $\mathbf{C}$ 

- i. From GH¢ 100 to 90 demand is elastic
- ii. From GH¢ 70 to 60 demand is uniform elastic

# iii. From GH¢ 50 to 40 demand is inelastic

- **D]** Total revenue increases as price falls from GH¢100 to GH¢70 (i.e. within the elastic range). Total revenue remains unchanged when the elastic coefficient equals to one (1). Total revenue falls as price falls from GH¢50 and below. Demand becomes relatively inelastic.
- E] Supply refers to the various quantities of a commodity that seller or producers are willing to offer for sale of various prices all other things being equal.

  A decrease in supply means that at a given price less of the commodity is supplied.

Other things being equal a decrease in the supply of cement would raise the price of cement as shown in Fig (a).

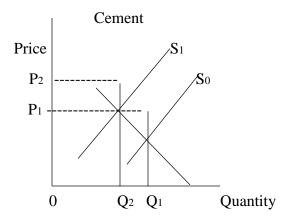
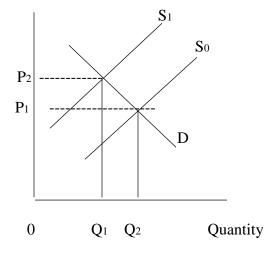


Fig (b) Cement Blocks



Cement is used for making cement blocks. If the price of cement rises, the cost of producing cement blocks would rise, and the supply of cement blocks would decrease shifting the supply curve to the left as shown in Fig (b).

Given the demand for cement blocks the price would increase as in Fig (b).

# **QUESTION 2**

# $\mathbf{A}$

- i. Increasing returns to scale refers to the situation where if all factors are increased in a given proportion, output increases in a greater proportion. (E.g. If labor and capital are increased by say 10% output produced increases by more than 10%)
- ii. Decreasing returns to scale refers to a situation where if all inputs are increased in a given proportion, output produced would increase in a smaller proportion than the increase in the inputs.

**B**]

i.	<b>Cost of Labour</b>	Cost of Capital
	1 x 100 = GH¢ 100	$2 \times 500 = GH $ ¢ $1000$
	2 x 100 = GH¢ 200	$4 \times 500 = GH \notin 2,000$
	$3 \times 100 = GH $ ¢ $300$	$6 \times 500 = GH \notin 3,000$
	4 x 100 = GH¢ 400	$8 \times 500 = GH \notin 4,000$
	$5 \times 100 = GH $ ¢ $500$	$10 \times 500 = GH \notin 5,000$
	6 x 100 = GH¢ 600	$12 \times 500 = GH \notin 6,000$
	7 x 100 = GH¢ 700	$14 \times 500 = GH \notin 7,000$
	8 x 100 = GH¢ 800	$16 \times 500 = GH \notin 8,000$

(ii) and (iii)

1 Output	2 Cost of Labor	3 Cost of Capital	4 Total cost	5 Average cost
	$\mathbf{GH} \mathfrak{c}$	GH¢	(2) + (3)	<b>(4)</b> ÷ <b>(1)</b>
			GH¢	GH¢
20	100	1,000	1,100	55
60	200	2,000	2,200	37
120	300	3,000	3,300	28
200	400	4,000	4,400	22
250	500	5,000	5,500	22
300	600	6,000	6,600	22
320	700	7,000	7,700	24
330	800	8,000	8,800	27

# **QUESTION 3**

- A] Equilibrium price refers to the price at which the market forces of supply and demand are balanced such that there is no tendency for a change.
- B] Minimum price control refers to the lowest price set by the government below which it is illegal to sell or buy while maximum price control is the highest price set by government above which it is illegal to trade. Minimum price is often set above the market equilibrium while maximum price is often set below the market price.

**C**]

- i Total revenue before the imposition of the minimum price  $GH \not \in 12 = GH \not \in 48,000$
- ii. Excess supply of maize after the minimum

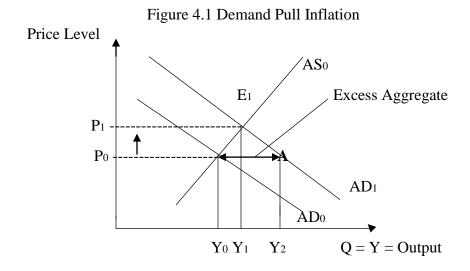
$$60,000 - 30,000 = 30,000$$
 bags

- Total revenue of farmers if the government does not buy the supplies  $GH \notin 15 \times 30,000 = GH \notin 45,000$
- iv. Farmers will be worse off because their revenue would have fallen from  $GH\phi 48,000$  to  $GH\phi 45,000$

- i. The government can buy up the supplies and store to be sold in the future. This has the effect of shifting the demand curve to the right.
- ii. Government can restrict the supply of maize by limiting the average that can be used for maize farming. This has the effect of shifting the supply curve to the left.
- iii. Government can also stimulate demand by finding new uses for maize or by looking for external market for the surplus maize. This has the effect of shifting the demand curve to the right.

# **A**]

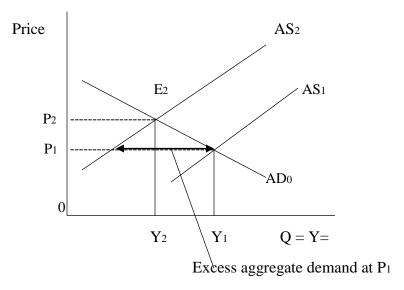
(i) Demand Pull Inflation: It is a type of inflation caused by excess demand for goods and services at the prevailing price level. The source of the excess demand is due to permanent increase in aggregate demand.



In Figure 4.1, an increase in aggregate demand from AD<sub>0</sub> to AD<sub>1</sub> given the aggregate supply creates excess demand at P<sub>0</sub>. This disruption of the initial equilibrium (E<sub>0</sub>) causes price levels to increase from P<sub>0</sub> to P<sub>1</sub> resulting in demand pull inflation.

(ii) Cost Push: It occurs as a result of increase in cost of production which pushes up the price level

Figure 4.2 Cost-Push Inflation



In Figure 4.2, aggregate demand and supply curves intersect at point E<sub>1</sub> and the general price level is P<sub>1</sub> and output is at Y<sub>1</sub>. Assuming there is an increase in cost of production throughout the economy, the aggregate supply curve will shift upward from AS<sub>1</sub> to AS<sub>2</sub>. This causes demand at P<sub>1</sub> to increase

. The general price level will then increase to P2 and output will fall from Y1 to Y2.

B] If the rate of inflation falls from 13.5% to 9.5%, it does not mean prices of goods and services will fall. It indicates that the rate of increase in average price level has fallen. Meaning, prices are still increasing in the economy but on the average at a reduced rate of 9.5%.

A. The consumption function shows the relationship between consumption spending and disposal incomes.

B. 
$$C = a + b(Y - T)$$
 or  $C = a + b(Y - tY)$   
 $C = a + bYd$   
 $C = a + bY$ 

Where C is consumption expenditure:

- a. is autonomous (non-income) consumption expenditure
- b. is fraction of disposal income that managers spent

Y is national income

T is tax deduction

T is fraction of income that is taxed

C.

- i. The general price level: When the general price level increases (inflationary period) the public generally spend proportionately more on consumption than before to maintain their consumption expenditure. Moreover the rise in the general price level implies the falling value of money and this serves as a disincentive to save more by the public.
- ii. Fiscal Policy: The government can reduce consumption by levying excise duties, sales tax and income tax on goods and services and the income of households and business. Similarly a reduction in these taxes increase the consumption of the public thereby raising the propensity to consume.
- iii. Rate of interest: Higher rate of interest induces the public to save more which reduces the propensity to consume. Secondly higher interest rate raise the cost of borrowing hence it reduces credit-financed consumption
- iv. Changes in expectations: When the public (especially households) expect their incomes to increase they increase their current consumption thus raising the propensity to consume. On the other hand if they expect their income to fall in the future (e.g. as a result of a recession) they reduce their current consumption by saving more to take care of the future hence reducing the propensity to consume.
- v. Imitation: People have a natural tendency to imitate others' consumption habits (keeping up with the jones). People in the lower and middle income ranges imitate the consumption standards of the higher income groups and this increases their propensity to consume.

vi. Windfall and losses: When the prices of shares go up. Shareholders begin to think themselves better off and raises their consumption. Similarly a fall in share prices will reduce the consumption of shareholders.

## **QUESTION 6**

### A. Reasons why international trade takes place include:

- i. There is uneven distribution of resources such as minerals which makes it possible for some countries to produce minerals such as gold, oil, platinum etc. on large scale while others cannot even get the little they require to run their industries.
- ii. Differences in climate conditions and soil fertility which makes it possible for some countries to produce agricultural commodities such as cocoa, coffee, wheat, apples etc. while others cannot.
- iii. Differences in human talents and man power development which makes it possible for some nations to produce certain types of goods and services at a cheaper cost than others.
- iv. Because no country can be self-sufficient, there is the need for foreign trade to supply goods and services that cannot be produced locally and to provide market for surplus production elsewhere.

### B. Benefits of foreign trade:

- i. Foreign trade leads to improvement in the living standards of the trading partners because several kinds of goods can easily be obtained from all parts of the globe at relatively cheap prices.
- ii. International trade makes possible the enjoyment of goods and services that a country may find very difficult to produce with its limited natural resources and manpower.
- iii. It makes possible the exchange of ideas and extension of technical knowledge which are necessary for rapid economic developments.
- iv. Foreign trade enables developing countries (such as Ghana) to obtain loans, capital goods and technical expertise from the developed nations for their development programs.
- v. International trade encourages countries to specialize and focus on the production of those commodities in which they have greater cost advantage leading to increased output of goods and services for all trading partners.

- vi. Foreign trade helps to bring about peace and unity among nations of the world. (E.g. ECOWAS and EU).
- vii. International trade provides substantial revenue in the form of export earnings and customs duties for many countries especially the developing ones.

A.

- i. Fiscal policy is the deliberate spending and tax actions undertaken by the government in order to achieve some macroeconomic objective such as price stability, creation of employment etc.
- ii. The government budget is the itemized estimate of expected revenues and expenditures of government for a given period in the future, usually one year.

B.

i.	Capital or development expenditure	GH¢m
	<ul> <li>New school buildings</li> </ul>	220
	<ul> <li>Rural electrification</li> </ul>	300
	<ul> <li>Rehabilitations of major clinics</li> </ul>	<u>160</u>
		680

- ii. Indirect taxes = 340 + 90 = GH¢ 430m
- iii. Total tax revenue = Direct taxes + Indirect taxes (125 + 80 + 40) + (340 + 90)

Total 
$$tax = 245 + 430 = GH$$
¢ 675m

$$\frac{245}{675} \times \frac{100}{1} = 36.3$$

iv. Budget surplus (deficit) = Total Receipts – Total expenditure

Total receipts = 
$$340 + 90 + 125 + 95 + 80 + 40 + 180$$
 = GH¢ 950  
Total expenditure =  $480 + 220 + 110 + 300 + 160 + 180$  = GH¢ 1450  
Budget deficit = GH¢ 500