

**NOVEMBER 2017 PROFESSIONAL EXAMINATIONS
BUSINESS MANAGEMENT & INFORMATION SYSTEMS (PAPER 1.2)
CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME**

EXAMINER'S GENERAL COMMENTS

With the extension of tuition, learning and materials to candidates all over the country, we expected to see better performance over the previous Examinations but that did not happen. Some of the candidates did not seem to have prepared well for the examinations.

STANDARD OF THE PAPER

The Business Management and Information Systems paper was of standard quality. The questions indicated how many points candidates were required to explain/discuss for the marks allocated.

PERFORMANCE OF CANDIDATES

The performance of candidates was generally not good. Candidates' performance compared very negatively with that of the May 2017 edition. Of the 397 candidates who wrote the Paper, 221 of them passed, giving a 56% pass rate, as against the about 70% pass rate recorded in the previous examinations.

QUESTION ONE

- a) Your Chief Executive Officer has suggested that the numerous problems confronting your organization are as a result of the type of organization structure adopted and has requested for your advice regarding a change to the matrix structure.

Required:

- i) Outline **FIVE** factors to justify the adoption of the matrix organisation structure. **(5 marks)**
- ii) Explain **FIVE** challenges associated with matrix organisation structure. **(5 marks)**
- b) In an organization, every action of management body is influenced by the environment. In this context, “*environment*” means understanding the surroundings or conditions in which a particular activity is carried out.

Required:

Distinguish between *internal* and *external* environment of a business organisation.

(5 marks)

- c) Good links between operational and strategic planning help in the execution of corporate strategies. However, managers gain from knowing the difference between strategic and operational objectives because this distinction plays a major role in the conversion of an overarching vision into specific tasks.

Required:

Distinguish between a *strategic plan* and an *operational plan*.

(5 marks)

(Total: 20 marks)

QUESTION TWO

- a) Your friend who is the Chief Executive Officer of a food processing company recently discussed with you the need for his organisation to adapt to technological changes by investing in Management Information Systems (MIS). His problem however is that the benefits that will accrue to the business may not justify the costs involved in such huge investments.

Required:

Convince your friend by stating **FOUR** benefits that will accrue to the company for investing in such a project. **(4 marks)**

- b) Businesses use Management Information Systems (MIS) in their operations. Illustrate with **ONE** example each of how businesses use MIS in the following functional areas.
- i) Finance and Accounting
- ii) Manufacturing and Production
- iii) Sales and Marketing
- iv) Human Resource Management **(16 marks)**

(Total: 20 marks)

QUESTION THREE

- a) Frederick Taylor's attempt to apply technical knowledge to the analysis and standardization of work came to be known as Scientific Management.

Required:

Describe **FOUR** principles of Scientific Management. **(12 marks)**

- b) Explain the following:

- i) Leadership **(2 marks)**
ii) Power **(3 marks)**
iii) Authority **(3 marks)**

(Total: 20 marks)

QUESTION FOUR

- a) Akosua Textiles Ltd has grown from a hand weaving "kente" factory to a modern textiles and fabric processing company with shops spreading across the country. The company faces a lot of system challenges and the Board appointed a systems expert to conduct a review of systems and technology within the company.

The findings of the expert were:

- the systems are generally weak and the benefits of modern software applications lacking;
- the accuracy and completeness of information received by head office from shops needs to improve;
- the existing financial system is struggling to cope with the rapid growth of sales;
- common computerized stock records will also be required for proper inventory management and control; and
- internet possibilities are being missed and there is no virtual network.

Required:

Identify **FIVE** ways in which Information Technology and Information systems might improve Akosua Textiles Ltd. **(10 marks)**

- b) Training presents a prime opportunity to expand the knowledge base of all employees, but many employers find the development opportunities expensive.

Despite the potential drawbacks, training and development provides both the company and the employee with benefits that make the cost and time a worthwhile investment.

Required:

Outline **THREE** benefits to be derived from training and development by

- i) a company and
ii) an employee. **(6 marks)**

- c) It is Adjala Ltd's corporate responsibility to have a robust health and safety policy in place, to identify reasonably foreseeable risks and to reduce those risks so far as is reasonably practicable. For the organisation, this means having a thorough policy statement, good organisational responsibilities and tight procedures in place so that it can manage risk and comply with legislation.

Required:

Identify **TWO** benefits to Adjala Ltd from having a robust and safety policy. (4 marks)

(Total: 20 marks)

QUESTION FIVE

Without relevant information, it would be nearly impossible for the management of an organization to make meaningful decisions.

Required:

- a) Distinguish between *data* and *information*. (2 marks)
b) Explain the steps involved in converting data into information. (10 marks)
c) Identify and explain **FOUR** essential qualities of information.

(8 marks)

(Total: 20 marks)

QUESTION SIX

- a) Explain the following:

- i) Marketing Concept (4 marks)
ii) Marketing Mix (3 marks)
iii) Marketing Research (3 marks)

- b) Identify and describe **FIVE** situations which would compel an organization to give serious consideration to its marketing efforts. (10 marks)

(Total: 20 marks)

QUESTION SEVEN

- a) A strategy is a course of action, including the specification of resources required to achieve a specific objective. Strategy is concerned with the higher direction of an enterprise that involves top management.

As an alternative to a systematic goal-structured approach, an organisation may focus on Critical Success Factors (CSFs) to manage strategy. Johnson and Scholes describe **SIX** stages in process of managing strategy using CSFs

Required:

- i) What are Critical Success Factors (CSFs)? **(2 marks)**
ii) Explain any **FOUR** of the stages of managing strategy using CSFs. **(8 marks)**
- b) Quality is the totality of features and characteristics of a product or service which bears on its ability to meet stated or implied needs” (*Holmes, 1992*).

Required:

- i) Distinguish between *Quality management*, *Quality assurance* and *Quality control*. **(6 marks)**
ii) Outline any **TWO** of the five general activities involved in quality management systems. **(4 marks)**

(Total: 20 marks)

SOLUTION TO QUESTIONS

QUESTION ONE

a)

a) **Factors to justify the adoption of matrix organizational structure**

The Matrix Structure refers to the organizational arrangement or structure in which individuals from functional areas of the organization are assigned to a specific project or task.

- **Knowledge Pool**

Matrix organizations are effective at knowledge management since individuals with specialist skills are brought together to undertake specific duties and this leads to lower costs and increased productivity.

- **Training Grounds**

A matrix organizational structure serves as a good training ground for managers since they can acquire skills they do not already possess from project colleagues for their future performance.

- **Creativity**

The pooling of different skills enhances creativity and diversity among the employees. This may lead to higher employee morale and higher productivity.

- **Information Flow**

The matrix structure facilitates effective information flow because employees from different functional areas are brought together, allowing for information to be transmitted more quickly throughout the organization.

- **Flexibility**

The matrix structure enables the organization to share its human resources across different project sites, leading to efficiency, lower costs and increased profitability.

- **Integration**

There is the relative ease of integration of project members back into their previous departments once the project has been completed.

- **Inter Departmental Co ordination**

With this type of structure, employees are challenged constantly and this results in the development of inter departmental coordination to solve emerging problems.

(Any five points explained x 1 marks= 5 marks)

ii) **Challenges of Matrix Structure**

- **Violates Unity of Command**

The matrix organization structure violates the basic principle of unity of command since subordinates will have to report to two superiors at the same time and this may create organizational frictions.

- **Costly**

A matrix structure is often more costly to implement since the employees that make up the project team will be drawn from different functional areas and the organization will have to spend much money on communication, etc.

- **Role Conflict**
The personnel who are assigned to a project will still be evaluated by their functional managers who now have little chance of assessing their work, leading to role conflict on the part of subordinates in the performance of their duties.
 - **Inefficiency**
The existence of multiple managers and numerous procedures may lead to inefficiency in the management of the organization and therefore lower productivity.
 - **Missed Targets**
The matrix structure may result in situations where departments may find it difficult to achieve set targets because employees who are highly efficient would have been drafted into a project team.
 - **Information Logjams**
The adoption of a matrix organization structure may lead to the proliferation of information logjams due to the magnitude of work overload on employees.
- (Any five explained x 1 marks)**

b) Internal Business Environment Vs External Business Environment

- The **internal environment** of a business refers to the forces which impact on the operations of the business and over which it has some element of control. Such factors include the level and quality of equipment, the quantity and quality of its Human resources, marketing capabilities and strategies. **(2.5 marks)**
- The **external environment** of a firm consists of the sum total of all conditions and forces which affect the strategic options of a business but which are typically outside its control. Common external factors fall into several categories, including socio-economic, legal or ethical, political and technological. Socio-economic factors relate to the values, attitudes and concerns of the firm's target customers and their economic abilities to afford its products. **(2.5 marks)**

- c) A strategic plan is a long term plan that is developed by the organization to enable it achieve its objectives and covers the entire firm. An operational plan on the other hand is a short term plan developed by a middle manager which concentrates on a specific functional area.

Whereas a strategic plan covers a period of about five years and is stated in general terms, an operational plan is stated in specific terms and covers a short period. **(5 marks)**

(Total: 20 marks)

QUESTION TWO

a) Benefits of Management Information Systems {MIS}

- It will lead to better administration and coordination in the firm.
- It will enhance the public image of the organization.
- MIS will improve decision making in the firm.
- It will lead to closer relationship among employees.
- It will facilitate proper knowledge management of the firm.
- It will lead to improved inventory control.
- It will increase productivity of the firm.

(Any four points stated x 1 mark= 4 marks)

b) Application of MIS in Functional Areas in an Organization

i) Finance and Accounting

Finance and accounting information systems assist in maintaining records relating to the flow of funds in the firm by producing financial statements. Examples of financial statements include cash flow forecasts, income statement.

(4 marks)

ii) Manufacturing and Production

Manufacturing and production information systems will assist in the collection and supply of data to operate, monitor and control the production systems including the purchase of raw and other materials, an example being material handling, material planning and inventory control systems.

(4 marks)

iii) Sales and Marketing

Sales and marketing information systems support the sales and marketing function by enabling the effective and efficient movement of goods and services from producers to end users. An example is that sales support systems keep customer records.

(4 marks)

iv) Human Resources

Human resource information systems assist with recruitment, placement, compensation and career development of employees of the organization as in the case of personnel records keeping, applicant tracking, training and pension updates.

(4 marks)

(3 marks for explanation and 1 mark for each example)

(Total: 20 marks)

QUESTION THREE

a) The four principles of Scientific Management are as follows:

- The development of a true science of work. This means that all knowledge which employees possess should be gathered and recorded by management who should apply reason to the solution of problems and should not rely on experience and guesswork. **(3 marks)**

- The scientific selection and progressive development of employees. Thus, workers should be carefully selected, trained and given tasks for which they are best suited in order for them to contribute meaningfully towards productivity. **(3 marks)**

- The constant and intimate cooperation between management and workers. This means that the relations between management and employees was felt to be the most important aspect of scientific management. **(3 marks)**

- Bringing together of the science and the scientifically selected and trained men. This means the application of techniques to plan, measure and control work for maximum productivity. **(3 marks)**

b)

- i) Leadership can be defined as the activity of influencing people to willingly act in a manner to achieve group objectives. It can also be said to be a process of getting others to willingly work to achieve objectives without being coerced. **(2 marks)**

- ii) Power refers to the ability of one person to do something or require another person to act in a certain manner irrespective of the nature or extent of resistance demonstrated by the person from whom the action is required. **(3 marks)**

- iii) Authority is the scope and amount of discretion given to a person to make decisions by virtue of the position he holds in an organization. This right to make decisions is recognized both by the person exercising the right and those over whom that right is exercised. **(3 marks)**

(Total: 20 marks)

QUESTION FOUR

a) Five ways in which either information technology (IT) or information systems (that these days tend to utilise IT) could be used to improve Akosua Textiles' operations are identified below.

- **Establish a well-designed website**

Akosua Textiles could invest in a website to provide information to customers, enhance the brand, offer online booking for optical appointments and sell own-brand products. It would be essential that the site was integrated with back-office systems, to ensure the booking process went smoothly. The site should include e-commerce and also be a key marketing tool.

(2 marks)

- **Establish a Wide Area Network (WAN)**

By linking computers at shops together, a WAN would facilitate improved communication and collaboration between shops. The WAN would enable data and information to be shared quickly and effectively, and would also provide a platform for the implementation of organisation-wide systems.

(2 marks)

- **Implement a new integrated sales, stock and financial system**

There are currently a series of shops operating independent computer-based systems and some shops using manual systems. A common stock and point of sale system, integrated into the proposed new financial system, would save time analysing and searching for information in shops and enable quicker and more accurate production of financial information. Integration between systems is important to reduce the need for keying data, as this is expensive and likely to introduce data inconsistencies and errors.

(2 marks)

- **Introduce consistent, simplified operational procedures**

The new sales system referred to above should include an Electronic funds transfer at point of sale System (EFTPOS). This would enable staff to process sales more efficiently, improving customer service. It would also mean less time spent on accounting and administration tasks, as the calculation of sales figures and the updating of stock would be largely automated.

All shops should use the same system, allowing procedures to be standardised - bringing an additional benefit of staff being able to work at more than one shop.

(2 marks)

- **Implement an Executive Information System (EIS)**

An EIS sitting 'on-top' of the new integrated sales, stock and financial system would enable the senior managers to produce tailored high-level information to support strategic decisions. The software should facilitate the monitoring of Key Performance Indicators (KPIs) linked to Critical success factors.

(2 marks)

(5 points for 10 marks)

b) Benefits of training and development

i) The training benefits for the organization

- Minimize the learning costs of obtaining the skills the organization needs
- Lower costs and increase productivity
- Fewer accidents, and better health and safety
- Less need for detailed supervision

(Any 3 points for 3 marks)

ii) Individual employee the benefits of training and development.

- Enhance portfolio of skills. Even if not specifically related to the current job, training can be useful in other contexts, and the employee becomes more attractive to employers and more promotable.
- Psychological benefits. The trainee might feel reassured that they are of continuing value to the organization.
- Social benefit the job. People's social needs can be met by training courses.

(Any 3 points for 3 marks)

c) There are a number of benefits Adjala Ltd will enjoy for having a robust health and safety procedure.

- **Compliance:** It assists employers and employees in meeting their legal obligations to take reasonable measures to promote safe and healthy working.
- Protection of employees from needless pain and suffering.
- Damage to the corporate image and reputation may occur if it is found to have a poor health and Safety record.
- To avoid or reduce costs associated with accidents, illness absence and impaired performance.

(Any 2 points for 4 marks)

(Total: 20 marks)

QUESTION FIVE

- a) Data consists of raw, unprocessed facts and figures whereas information refers to the data that has been processed in a way that makes it meaningful for planning or decision making purposes. (2 marks)

b) The following are the steps involved in converting data into information:

- The first step involves gathering data from both internal and external sources.
- Data evaluation is where the data collected is examined and filtered so that irrelevant data is ignored or deleted.
- The next stage in the process is data analysis where the data is compared with a standard or yardstick as for example comparing actuals with budgets.

- The interpretation stage is where data is considered, interpreted and meaning added to it. This can be explanation as to why actual differs from expected.
- The stage in the process is where the processed information (processed data) is distributed to those who require it in the amount and manner they want it to enable them perform their jobs.

(5 steps @ 2 marks each = 10 marks)

c) The qualities of information include the following:

- **Accuracy**
To be useful, information must be reliable. That is, only facts and figures which add up must be given with no typographical errors and assumptions clearly stated and not make them look like facts.
- **Completeness**
Information should include everything relevant to the decision being considered. If relevant, comparative information should be included with excessive ones being avoided.
- **Cost Effectiveness**
It should not cost more to obtain the information than the benefit to be derived from its use. Information collection and analysis must be efficient with its presentation being clear such that users do not waste time wondering what it means.
- **Understandable**
Users of information should find it easy to read and understand it. Communication would be incomplete if the recipient of information does not understand it so as to be able to act in the manner required of him.
- **Relevance**
Information which is not required for a particular decision must be omitted. All significant information which is relevant to a decision being made or action required should be included.
- **Timeliness**
The information should be available when it is needed and in time for the required action to be effective. If information is not received at the time it is required, it ceases to be of importance to the user.

(4 qualities @ 2 marks each =8 marks)

(Total: 20 marks)

QUESTION SIX

a)

i) The *marketing concept* may be defined as a management outlook or philosophy which accepts that the key task of an organization is to determine the needs, wants and values of a target market and to adapt the organization to delivering the desired satisfaction more effectively and efficiently than its competitors. That is, in whatever activity the organization engages itself, it has the customer as its focus. **(4 marks)**

ii) The *marketing mix* can be defined as the set of controllable variables and their levels that the firm uses to influence the target market. These are the product, price, place and promotion which are often referred to as the 4Ps. A very important aspect of the marketing mix is that the 4Ps must be mutually supporting and consistent with each other. **(3 marks)**

iii) *Marketing research* can be defined as the objective gathering, recording and analyzing of all facts relating to the transfer and sale of goods and services from the producer to the consumer. **(3 marks)**

b) Situations which would compel an organization to give serious consideration to its marketing efforts.

- There will be the need for the marketing team of an organization to give serious attention to its marketing effort when it realizes that sales start to decline.
- When the rate of growth of sales or profits have been seen to be unsatisfactory, this will be an indication that extra efforts are required in the activities of the marketing department of the organization.
- When competition increases, then the marketing team would have to step up its efforts. If that does not happen existing and potential customer may be competed away.
- Significant changes in the purchasing behavior of customers will be a situation that calls for serious marketing efforts.
- An organization will have to reconsider its marketing efforts when costs of marketing starts to rise and sales and distribution expenses increase.

(5 points @ 2 marks each =10 marks)

(Total: 20 marks)

QUESTION SEVEN

a)

i) **Critical Success Factors (CSFs)** are areas in which (a) satisfactory results will enable successful competitive performance and (b) an organization must excel in order to outperform competition. Control and improvement can be achieved by setting key performance indicators (KPIs) in these areas, and monitoring progress against targets. **(2 marks)**

ii) **Johnson and Scholes describe six stages in the process of managing strategy using CSFs.**

- Step 1. Identify CSFs. This requires both experience of the organization and its activities, and sound judgment. The emphasis is not on what activities must be undertaken, but on what must be achieved in broad terms. Johnson and Scholes recommend that the number of CSFs should be restricted to six or fewer.
- Step 2. Identify the competences that must be displayed if the CSFs are to be achieved. Note that the emphasis has now changed from what must be achieved to the special skills and processes that will enable the required achievement.
- Step 3. The core competences identified must then be considered to determine whether they are adequate to provide genuine competitive advantage, or whether they must be improved or supplemented.
- Step 4. A Key Performance indicator (KPI) must be identified for each competence so that strategic control may be exercised.
- Step 5. We should ensure that core competences, the skill and abilities by which resources are deployed through and organisation's activities and processes such as to achieve competitive advantage in a way that others cannot imitate or obtain are present else, competitive advantage will not be achieved.
- Step 6. Competitors' responses must be monitored and their effects on the CSF structure forecast.

(Any 4 stages @ 2 marks each = 8 marks)

b)

i) **Quality management** is concerned with controlling activities with the aim of ensuring that products or services are fit for their purpose, and meet specifications. Quality management encompasses quality assurance and quality control. **(2 marks)**

Quality assurance focuses on way the product or service is produced. Procedures and standards are devised with the aim of ensuring defects are eliminated (or at least minimised) during the development/production process. **(2 marks)**

Quality control is concerned with checking and reviewing work that has been done. Quality control therefore has a narrower focus than quality assurance. **(2 marks)**

ii) General activities involved in Quality Management Systems

In general terms, any quality management system should involve the activities outlined below.

- Step 1. Plan Establish:
Standards of quality for a product (e.g. software package) r service (e.g. an IT helpdesk)
Procedures or production methods that ought to ensure that these required standards of quality are met.
- Step 2. Device suitable instruments and techniques to monitor actual quality.
- Step 3. Compare actual quality with planned quality using quality measures.
- Step 4. Take control action when actual quality falls below standard. Quality auditing involves a systematic inspection to establish whether quality objectives are being met.
- Step 5. Review the plan and standards to ensure continuous improvement. The activities and steps above describe a general approach to quality management.

(Please note: the steps or activities could be in any order.)

(Any 2 points for 4 marks)

(Total: 20 marks)