

**APRIL 2022 PROFESSIONAL EXAMINATIONS**  
**STRATEGIC CASE STUDY (PAPER 3.4)**  
**CHIEF EXAMINER'S REPORT, QUESTIONS AND MARKING SCHEME**

**GENERAL COMMENTS AND STANDARD OF THE PAPER**

The standard of the paper was good and the questions were clear. The case study was about HPC Ltd, a Ghanaian owned agro-processing and preservation business based in Ashanti region. The company processed and packaged various types of fruits for the local and foreign market.

The coverage was broad and within the scope of the syllabus. The marks were fairly allocated to each question.

**PERFORMANCE OF CANDIDATES**

The overall performance was below expectation. Most of the candidates scored low marks in questions six, seven and eight. The candidates demonstrated lack of understanding of net present value computation. It appears most of the candidates did not prepare well for the examination as a good number of them scored zero for most of the questions which contributed to the overall low percentage pass rate in the paper.

**NOTABLE STRENGTHS & WEAKNESSES OF CANDIDATES**

**Strengths**

No notable strength was observed.

**Weaknesses**

The candidates did not demonstrate transfer of knowledge from previous papers such as financial management and auditing. The candidates could not do analysis involving net present value, neither could they explain the essential internal controls to strengthen corporate governance. A few of the candidates appeared not to have prepared well for the paper.

## **INTRODUCTION**

HPC Ltd (HPC) is a wholly Ghanaian owned agro-processing and preservation business based in the Ashanti Region of Ghana. The company was incorporated on 29<sup>th</sup> December 1995, as a limited liability company, and its objective is to focus on the processing and packaging of various types of fruits for the local and foreign markets. The company is also engaged in the importation of partly processed food items for further processing and packaging by adding flavours and spices from around the world to suit both domestic and international markets. HPC supplies fruit juice to all the regions of Ghana and has been able to keep up a business-level strategy, sustainable competitive advantage in agro-processing market for all these years.

## **VISION**

To excel and expand to new segments with excellent quality and exceptional value in the Food industry and beyond with our superior ability

## **MISSION**

To build a world class food experience, to nourish, enrich and delight the taste buds of Ghanaians and beyond.

## **CORE VALUES**

- **Relationship Building:** The number one priority of the company is its customers. Therefore, it strives to work hand in hand with clients to meet their needs and expectations. Management does not believe in one-off business transactions, but rather long-standing business relationships that are mutually beneficial, hence they go the extra mile to maintain business relations by ensuring that customers get the best products and service on the market.
- **Quality:** The quality of the company's products is their source of pride. It therefore holds this value dearly at all stages of the production chain. Through teamwork and commitment to the values, management strive to maintain superior quality by sourcing out the best suppliers and raw materials, providing attractive and quality packaging to all products and implementing good quality management practices on product lines.
- **Creativity/Innovation:** The company's efficiency is borne out of creativity and innovation while maintaining quality standards. The Research and Development (R&D) department has a responsibility for creating authentic, ethnic, quality, and innovative food ingredients and gourmet food product lines.
- **Human Capital:** The policy of the company is to recruit, develop and retain the best the market has to offer.

## **OPERATIONS OF HPC**

HPC is one of the largest agro-processors in Ghana, and employs over 1,000 workers. The company has expanded its operations in the production of fresh fruit juice in all the regions in Ghana. HPC processes fruits such as pineapples, mangoes, papaya, coconut, passion fruit, and banana. The company sources these fruits from the Eastern and Bono regions in Ghana. The company will like to venture into the processing of melons and pomegranates which it would source from Egypt and South Africa. Fresh-cut fruits were the first product of HPC and initially, quantities were prepared for supermarkets in Ghana. Smallholder farms provided the majority of the supply of pineapples, although some pineapples are also sourced from a few commercial farms in Ghana.

The company purchases over 1,750 tonnes of raw fruit products from the fruit growers on a monthly basis. This linkage between the small fruit cultivators and the processing company is beneficial as the farmers benefit from prompt payment for their supplies and a higher rate per kilo of produce, compared to other competing buyers in the area, which ensures a continued supply of raw materials to its factories. HPC also provides technical advice and regular training on agricultural methods to the over 150 small-scale fruit growers and has been known to pre-finance the production activities of these farmers.

The company also provides inputs and equipment to the fruit growers for purchase, and takes on the technical and financial responsibility for certifying its suppliers. This, however, further obliges suppliers to remain loyal in their supply of produce to the company. The close proximity of HPC factory to these farmers allows it to obtain a regular supply of raw materials for its processing plant, which facilitates delivery of freshly-harvested fruit to local consumers within 24 hours.

The products of HPC undergo a significant amount of value addition at its local processing plants. The fresh fruit are bought and transported from local farmers to the factory, cleaned, cut, and packaged for sale. Fresh-cut fruit and juices are produced under strict domestic and international food safety and quality management systems. Additionally, the products are labelled and branded by the company, an important step in the value chain process. They are then transported by air-freight using commercial airlines, to market locations in the northern part of Ghana. The company's access to supermarkets in the regional capitals of Ghana is often attributed to the networks within the supermarket industry in Ghana. From a policy perspective, the continued expansion of Ghana's agro-processing industry may be attributed to regulatory reform, tax incentives, market linkages, investments into new fruits varieties, and public-private partnerships.

### **HPC'S CORPORATE SOCIAL RESPONSIBILITY**

The deep understanding of the community urged the company to give back to the community through the adoption of orphans and destitute children. The company also offers financial support to orphanages and currently is in the process of supporting some of these children to fund their education. Due to HPC's dedication to orphans and destitute children, the company ensures that there is no child labour involved in the processes of its agro-business. The company ensures that all purchases of its agro-products for export are from women co-operative associations. This policy is in line with the government of Ghana's poverty alleviation programme, to improve the livelihood of a great number of women in the country's rural regions and districts.

### **AGRO-PROCESSING AND ITS SIGNIFICANCE TO THE ECONOMY**

The agro-processing industry typically comprises of upstream and downstream sectors. Agro-processing firms are characterised by crucial backward and forward linkages. Backward linkages arise when local producers are able to satisfy their demand for raw materials and services from local suppliers. This may refer to the supply of credit, inputs, and other production-generating services. Backward linkages may be established by the procurement of capital goods and equipment from other industries; or the purchase of agricultural inputs from farmers.

Forward linkages on the other hand refer to the creation of additional opportunities in other parts of the economy, from the activity of agro-processors, through the sale of processed products. This refers to the marketing of these products and the generation of employment opportunities through the value-addition processes. Forward linkages have positive

implications for increased export earnings, employment generation, and greater food security that may be established through sale of processed goods to final consumers; and sale of processed goods as inputs to other companies who use these as inputs to their own production processes.

The role of agro-processing in Ghana's development could be vital, given its ability to generate increased demand for the products of other industries through backward or forward linkages. Despite the promising state of Ghana's agricultural sector, the linkage between agriculture and industry appears weak, and value additions by the manufacturing sector remain low. Agro-processing, an integrated form of agricultural development may be expected to have the strongest effect on agricultural production, given the increased demand for primary products from this sector. Additionally, the infrastructure, which is essential for promoting the growth in agro-processing, could also be vital to increased growth in the agriculture sector.

Although the agro-processing industry in Ghana is dominated by small- and medium-scale players, it continues to play a significant role in the Ghanaian economy. According to the Ghana Export Promotion Authority, the industry grew at an average rate of 14.93% in 2018 – 2020. A report from the United Nations Industrial Development Organization (UNIDO) shows that within the manufacturing sector in Ghana, the agro-industry represents about 54.6% of the total manufacturing value added. Specifically, the food and beverages subsector of the agro-processing industry accounted for about 32.5% of total manufacturing value added in 2020. The agro-processing industry is an important source of employment and income generation globally. In addition, other civil society groups report that the highest share of employment in Africa is in the agro-processing industry. In spite of the lack of national level data on employment in the industry, the agro-processing industry is an important source of employment for the rural people, and especially for women given that the sector is dominated by women.

The same report found that Brong Ahafo, Western, and Northern regions employ most of the labour force in the industry. The report also showed that micro agro-processing firms employ about 48% of the total agro-processing labour force. This is therefore reflective of the importance of the industry for employment, income, and inclusive growth for the country. The contribution of the agro-processing industry to total export earnings in Ghana cannot be overemphasised. Export earnings from the agro-processing industry have increased from US\$181.1 million in 2017 to about US\$902.5 million in 2020, representing a growth of 398% for that period. In 2017, the industry accounted for about 7.4% of total export earnings even though this dropped significantly to about 4.9% in 2020. In addition, processed and semi-processed agricultural products accounted for about 86.31% of the country's non-traditional exports, contributing US\$2.16 billion in export earnings in 2017 compared to the US\$2.11 billion in 2016 showing the trend in Ghana's agro-processed exports between 2017 to 2020. With respect to sector productivity, the survey found that the indigenous technology adopted among the companies in the industry has resulted in reduced efficiency and productivity, compared to the multinational agro-processing companies who are able to rely on modern and more efficient technology in their operations. The labour intensive and time-consuming features of the indigenous technology often hinder the opportunity to scale up operations, creating a scope for policy in this area.

## **FRUITS PROCESSING INDUSTRY**

Between the mid-1990s and 2002, Ghana depended on about four large fruit processing companies that employed very expensive, capital-intensive and imported technology for fruit-juice processing in the country. The huge capital outlay required for fruit-juice processing

served as an entry barrier. During the same period, there was a proliferation of flavoured drinks through the use of syrups and these types of drinks required substantially less start-up capital. Due to the large number of producers of flavoured drinks, the Soft Drinks Manufacturers Association of Ghana was formed. The viability and the perceived shortage of players in the fruit juice industry propelled the leadership of this association to engage local engineers in the manufacture of simple machines and equipment to overcome the huge capital outlay of fruit processing.

This initiative was largely successful and the subsequent locally manufactured technology adequately handled processing steps that ranged from the extraction of juices to bottling on a small scale. Washing and cutting up of fruits however remained a manual process. A main factor that increased the adoption of these technologies was its affordability. Also, the local equipment facilitates the production of juice on a relatively small scale. Over time, these local technologies have been further advanced with the introduction of hydraulic presses for juice extraction, a semi-automated process that further increases efficiency. A major challenge in the juice-processing industry in Ghana is the issue of a limited supply of fruit, which serves as the main raw material for the industry. Farmers are often unable to provide a constant supply of fruits to the processors' factories due to relatively high input prices and unexpected weather conditions. Also, fruit farmers in the peri-urban areas are gradually losing their farmlands to very large estate developers. With regards to packaging, the industry is challenged by a lack of access to clean and sanitary bottles. The heavy reliance on recycled bottles for its packaging is unsustainable as processors are not guaranteed continuous supply of these bottles. To get around this challenge, the association has begun to explore the option of using plastic bottles.

These however entail additional costs. Although not currently widespread, some players in the fruit-processing industry have begun to export cut fruits for export to European markets. Fruit export to European markets was precipitated by the high demand for the Ghana's sweet pineapple variety, accompanied by the proximity of the country to its target market, which ensures constant supply to Europe via cargo planes. This mode of transportation is however costly, and therefore an association formed by pineapple exporters has explored cheaper options to transport fresh produce to Europe. Sea freight appears to be a cheaper option, and combined with the availability of cold storage facilities at the ports, has facilitated more efficient transportation of processed goods to European markets.

## **FACTORS THAT WILL INFLUENCE HPC's STRATEGY FOR EXPANSION**

Patrick Swatson, a Trade Consultant was contracted by HPC to come out with a strategy to help propel HPC's expansion drive. The following are extracts from the report:

### **Capacity Building**

The process of learning in the fruit-juice processing subsector of the industry can be described as a top-to-bottom transfer of knowledge. Industry players periodically engage in different capacity building and training activities at the national or international level. Knowledge and skills gained about new technologies as well as best practices in the industry, which are likely to improve the production process, are then cascaded down to members through locally organised training workshops for its members. Additionally, the availability of juice processing manuals, through funding from the agriculture ministry and development partners, opens up the industry to more entrepreneurs.

## **Supply of Pineapples**

The supply of pineapples is dominated by small-scale farmers who operate on approximately 1–5 acres of land. Market women often play the role of middlemen, who take on the risks of storage, transport, and associated finance between farm and final consumer. Middlemen may supply harvested pineapples to small grocery stores or large-scale Multi-National Companies (MNC) shops. Alternatively, they may also supply pineapples to various processing plants. Once processed into juice or pulp, products may be sold in the local markets through retailers, or in the international market through the services of exporters, which may include large commercial farms. It is important to note that in addition to processed pineapples, large international supermarkets also buy the whole pineapple as well.

## **Sustainability**

Within the last 10 years, many fruit processing companies have ceased operations. These companies were engaged in production of the following products: pasteurized pineapple juice, pineapple and tropical fruit blends in tetra packs; orange and pineapple juice concentrates (conventional and organic) for exports. Reasons mentioned for the collapse of the companies included the following: Delays in payments by importers and retailers resulting in cashflow issues and consequent default in the payment of loans and overdrafts contracted from banks; Products not well known on the market leading to high advertising costs (i.e. one jingle on a radio station costs GH¢ 5,000/week) and consequent low promotion of locally produced fruit juice.

Imported fruit juices brands, on the other hand, are vigorously advertised, hence have high patronage compared to the local brands. Seasonality of fruit supply; Limited availability and high cost of packaging materials e.g. glass bottles, crown corks, tetra packs, stand up pouch, cartons, etc. as most of the packaging material has to be imported: Managerial issues that affected the operations of the companies; Pilfering and theft of the finished products by staff and high cost of capital loans for long term investment.

Two of the defunct companies, however are currently in the process of revamping their operations and have submitted business plans to the Ghana Exim Bank to source loans for expansion and refurbishing of existing factories. Most of the loan applications are at the final stages of approval. These companies may commence with the construction of new processing units.

## **Future Potential of the Fruits Processing Business**

Four businesses are currently seeking funding from the Ghana Exim Bank to set up new fruits processing factories for the domestic market. Research has revealed that for a fruit processing company to succeed in the local and international market, it is crucial that a strong supply base is continuously guaranteed. As a result, most well performing processing companies have strong linkages with fruit producers. Ghana imported GH¢ 98.5 million (USD 17.8 million) worth of fruit juice for domestic consumption in 2018. Only 28% of total domestic demand, worth USD 5.0 million, is produced in the country. Potential therefore exists to increase fruit juice production for the domestic market. The major export destinations of fruit juices from Ghana in 2018 are the EU market and regional trade mainly in West Africa. About 45% of exports valued at USD 4.8 million were shipped to the Netherlands in 2018. In terms of regional trade, Burkina Faso and Nigeria were the major destinations of Ghanaian fruit juices. Ghana imported about 37% of its fruit juice for local consumption from Spain, followed by South Africa at 25%, Belgium 14.8% and the US at 4.3%. To meet the domestic demand for fruit juices and juice concentrates for blending for some local companies, Ghana's imports increased

from GH₵ 60million in 2014 to GH₵ 102 million in 2017. Awareness creation on healthy eating, establishment of shopping malls in Accra and big cities across Ghana, growing middle class and booming street vendors producing fruit smoothies for consumption contributed to the high demand. Additionally, there has been a steady increase in new hotels with increased demand for fresh fruits and fresh fruit juices and as a result high demand for fruits such as oranges, pineapple, mangoes, bananas, coconut and watermelon in the domestic market. Source: UN COMTRADE

It is worth mentioning that these processing companies also have linkages with the major fruit exporters for purchase of second grade fruit for processing. Interviews with farmer groups and key respondents revealed that between 30–40% of their citrus and mango is sold to processing companies, while the remainder is sold to the local and regional markets. Fruits like mango, citrus and pineapple are purchased from producers at a pre-determined price negotiated between the processors and the producers before the start of each harvesting season. Contractual agreements between the companies and producers or suppliers are the exception rather than the rule. The pre-determined prices include transport costs, and in most cases, the processors organise the harvesting and transportation of fruit from the farm gate to the processing factories. Processors normally pay their suppliers 2 weeks to 1 month after receiving the fruit. This is usually paid to the farmer associations by cheque or cash, and they in turn pay their individual members by cheque, cash or mobile money transfers.

### **Quality Control**

Apart from the large-scale fruit processing companies that have storage facilities (i.e. temperature regulated chambers to store large volumes of fruits especially during the major season), storage facilities are nonexistent in most factory premises visited. Fruits are usually processed within 48 to 72 hours upon delivery to the factory gates to prevent any wastage and fruit losses. However, most processors are confronted with storage problems during the major season when fruit is in abundance and becomes more difficult to manage fruit supply and the capacity of the processing factories. To meet international standards, the processors have inspection teams that undertake on-farm inspections and check on fruit quality (i.e. brix level, sizes, mechanical damage, etc.). The focus is to undertake quality checks and then scheduling a harvesting plan on the various farms with the producers and their associations. Generally, most of these companies are certified by both domestic and international bodies on food safety standards. Local food certification approvals are done by the Food & Drugs Authority, Ghana Standards Authority and Environmental Protection Agency. It was observed that companies producing concentrates for exports, package finished products in aseptic bags placed in drums or wooden bins for transportation. For dried fruit, bulk packaging using polythene bags and paper cartons are used. In addition, stand up pouches were used for both the export and domestic markets. The majority of packaging material is imported as very little is produced in Ghana.

### **Marketing of Products**

Availability, high cost and appropriateness of packaging material for product shelf life are the main challenges confronting local processors in marketing their product. Imported fruit juices are usually packaged in tetra packs and have a shelf life of one year. The local products packaged in glass and PET bottles have shelf lives of six months and two weeks respectively. Also, the local products have high volume content but low value packaging, hence consumers prefer to buy the one litre tetra pack fruit juices than the local ones. Exports of processed fruits are mainly to the EU market. Orange and pineapple concentrates are shipped to international buyers who are mainly (wholesalers/ distributors) that buy concentrate for distribution to juice

producers. A few exports have been undertaken on the regional market (including Togo, Benin and Niger) mainly through trade shows. Less than 1% of concentrates produced are sold locally to alcoholic beverages processing companies. Most of the exporting processing companies have a contract with the buyers and payments are made to the company upon arrival of the consignment in the final destination.

There are also buying criteria to meet: quality of product, price, consistency and timely delivery of supply volumes. On the domestic market, processors sell their finished products through distributors, supermarkets, retailers, hotels, domestic airlines and schools. Generally, most companies interviewed indicated the biggest challenge in marketing and sales of products are consistency of supply and good prices.

The fruit industry covers key export commodities and offers great potential for contributing to Ghana's effort at enhancing the non-traditional export economy and for accelerating the domestic fruit processing sub-sector. However, some production difficulties are hindering its export and processing activities namely; Seasonality of fruit supply makes it more difficult for the processing companies to produce all year round, hence the low volumes of processed fruits. Apart from pineapple, papaya and bananas that are available throughout the year, the rest of the fruits are seasonal, with fruit availability ranging between three to five months in a year. Pest and diseases such as anthracnose, powdery mildew, etc are another challenge to contend with.

#### **Types of packaging material Characteristics:**

- Glass bottle (Not easily available; High costs; Risky in handling; Logistics in distribution very expensive)
- PET bottle (Not expensive and easy to handle; Can be recycled; Not environmentally friendly)
- Tetra Pack (Not easily available and expensive; Not environmentally friendly; Can be recycled)
- Stand up pouch (Not easily available and expensive; Not environmentally friendly; Can be recycled)

#### **Challenges in the Fruit Processing Industry**

Most processing companies are producing below the capacity of the processing equipment. The result is low volumes of finished products at high production cost (high fruit, labour, packaging and utility costs), thereby making the local juice products more expensive than the imported ones. Choice of technology is often poor, since obsolete and brand-new processing equipment are often used together in the same processing plant. There is an absence of skilled technicians needed for maintenance and repair of spare parts. This is particularly the case among local SMEs. There is an absence of skilled staff and those not adequately trained for the job, in the local processing companies (quality control officers, engineers for maintenance/repairs, accountants and limited factory workers), resulting in low production efficiency. There are high production losses, due to a lack of storage facilities (i.e. pre-cooling chambers) before processing and also for fruit storage during bumper seasons. Poor post-harvest practices in the area of fruit handling (i.e. transportation) lower the quality of fruits produced and contribute to post harvest losses. At the processors end, there are challenges in meeting consistency and quality of product and frequent equipment breakdowns, which affects production volumes, risk of contamination, increased production cost, and other constraints. Value chain actors in the fruit industry are only partially aware of the production potential.

The recent introduction of the 50% reduction in benchmark port value on selected imports items (including fruit juice) is set to worsen the plight of local fruit juice processing companies,

due to imported products benefiting from lower tariffs. This makes imported products more competitive than those produced locally. This has been a major concern for the local processors, since this will increase the influx of cheaper imported goods onto the domestic market. It was observed during the interviews that fruit processing sector lacks support in sourcing appropriate packaging materials from manufacturers across the world. For instance, government could assist processors to undertake group sourcing of packaging materials at cheaper costs and also ensure timely delivery. The fruit processing sector continues to rely on imports of packaging materials such as Tetra pack, aseptic bins, wooden bins, drums, glass bottles, stand-up pouch, cans, etc. to package their products. Currently, processors import these packaging materials individually and costs are very high. Delays in supplying the imports on time, the correct specifications for the packaging materials, and high shipment cost invariably affect the cost of the finished products.

Another hindering factor is the high utility bills (electricity, water, gas and fuel) paid for processing activities in their processing units. The resultant effect is a high production cost which invariably makes the local product more expensive than the imported fruit juice.

It was also observed that Ghana's proximity to the EU market should offer cheaper freight charges on exports of processed fruits when compared to other regions of the world. Processing plants are located near production areas, making it easier to source fruits for processing. There is also sufficient raw material available for processing. Managerial competences are present in the sector and packaging materials, e.g. PET bottles and paper cartons are manufactured locally. The domestic market for processed fruit (i.e. juices, dried fruits and smoothies) is expanding and important investments have been made in the development of the fruit sector (i.e. pack houses with pre-cooling facilities, reefer containers for the transport of fresh and processed fruits for exports). Current government programmes and policies are supportive to the processing sector. However, high pest and disease pressure results in low productivity. The processing capacity is not fully utilized within the sector and processors face challenges with seasonality of supply of fresh pineapple and mango which are imported from neighboring Côte d'Ivoire, Burkina Faso and Senegal during lean season (April to June) as well as from Brazil in August and September. Inadequate fruit storage capacity results in losses during peak season and production losses from contamination occur when machinery breaks down. A mix of new and overaged technical equipment result in low juice extraction and additional processing of and market for by-products is limited. Access to finance is a challenge, which makes it difficult for processors to purchase inputs and invest in their facilities. High cost of capital loans for long term investment is also a challenge.

There are availability of improved seeds and new varieties and research on good agricultural practices and pest and disease control. The ECOWAS Trade Liberalisation Scheme once put in place will allow for duty free access to the regional market. There is an increasing demand in local and sub-regional markets and growing incomes and middle class in Ghana brings more opportunities to serve the local market. There is growing demand in Europe for fresh and processed fruit. However, imported fruit juices with favourable tariffs are cheaper than locally processed goods. There is competition from countries such as Brazil, Spain, the Netherlands, South Africa, UK and Morocco. The influx of fruit juices from Côte d'Ivoire, Burkina Faso and Nigeria, unfavourable climatic conditions (i.e. rainfall patterns and drought) and the requirement from importers lead to high costs.

Generally, an analysis of the fruit processing sector in Ghana shows low capacity utilization of the processing companies. Out of an estimated 2,240 Metric Tonnes (MT) of installed

processing capacity for fruit juice and concentrates, about 62% of this capacity was used in 2019. Installed processing capacity of 868 Metric Tonnes (MT), is currently under-utilized with only 176 out of 216 processing companies functional in 2019.

### **Recommendations**

On the basis of the analysis presented, there is the need for HPC to take the necessary steps to address the challenges identified in order to make the expansion project operationally and financially sustainable.

On the supply and demand of raw material, it is imperative HPC work closely with producers to ensure ready access to inputs. This is in terms of the required volume as well as the quality of the fruit. Seasonality of fruit supply can never be completely overcome but a mix of different varieties with different maturity times can alleviate this to some extent. HPC can also consider diversifying its mix of processed fruits.

The control of pest and diseases needs to improve through integrated pest management and advisors that are well trained in the matter. HPC should work with the suppliers of raw materials to explore opportunities to provide effective control measures to ensure disease free orchards and to secure funds for irrigation facilities together with the appropriate technical advice on best irrigation practices.

Business planning by HPC can be improved including taking forecast and potential risks into account. A gross margin analysis can assist the company to operate on the capacity that is required to make it a profitable enterprise. Investing in technology that is suitable for the size of the processing company and ensuring that equipment is of high quality will enhance the processing.

Enhancement in skills needs to be done either by involving the Colleges of Agriculture and the input companies to ensure adequate training as well as on the job training. Investment in appropriate post-harvest storage facilities and transportation should be promoted and required technologies made available for purchase through the input companies. HPC should adhere to quality standards both for the product specifications as well as for food safety. HPC should impress on the regulatory bodies to assist companies in the industry to be able to adhere to both national as well as international standards. On the competitiveness, HPC should appeal to the Government of Ghana to reconsider the tariff for imported goods as this leads to unfair competition between imported and locally produced processed fruit.

### **HPC's BOARD OF DIRECTORS**

#### **Mawunyo Kpo, Chairman of the Board**

He is 64 years old with about 40 years working experience in the Agro processing industry. He holds a degree in Industrial Engineering from the University of Manchester and a Master of Business Administration (MBA) in Entrepreneurship from the University of Hull. He has served in several capacities as a member of the Board of Directors of National Standard Board and the Ghana Chamber of Mines.

#### **Herty Assuman, Chief Executive Officer (CEO)**

Ms. Herty Assuman is the founder and CEO of HPC and has held this position since the inception of the Company in 1995. She is a food and nutrition specialist and an entrepreneur. She is 56 years and has over 10 years of experience serving on the board of many international

and local institutions and NGOs. She also holds an MBA in Management Information System from the University of Ibadan.

#### **Baffour Yiadom-Boakye, Non-Executive Director**

Mr Baffour Yiadom-Boakye holds a Master of Science in Biological Science in Public health from the Oxford University and a Bachelor of Science in Biochemistry and Pharmacology from the University of Southampton. Mr Baffour Yiadom-Boakye, 36 years old, was appointed to the HPC's Board on 2<sup>nd</sup> November 2014.

#### **Richmond Addo, Non-Executive Director**

Mr Richmond Addo is a corporate lawyer in South Africa, specialising in consumer law, document review and coding. He holds a law degree from the University of Ghana and a Bachelor's degree in Business Administration and Computer Science from Kwazulu-Natal, South Africa. Mr Richmond Addo was appointed to the HPC Board on 17<sup>th</sup> April, 2017 and is 42 years old.

#### **Marcus Tetteh, Non-Executive Director**

Mr Marcus Tetteh is an Investment Analyst and a Chartered Accountant with focus on Venture Capital & Private Equity. He Hold an Executive MBA from GIMPA. He also holds an MSc. in Accounting and Finance from UPSA. Mr. Tetteh is 39 years old.

#### **Seth Ashie, Board Secretary**

Mr. Seth Ashie is a financial analyst on the Ghana Stock Exchange. He is 33 years old and holds an MBA in Financial Engineering and a professional accounting qualification from the Institute of Chartered Accountants, Ghana.

### **MANAGEMENT TEAM**

#### **Lani Khato, Chief Operating Officer**

Ms. Lani Khato is the current Chief Operating Officer of HPC. She has been in the food and beverage industry for over 20 years and has worked in various capacities in Ghana.

#### **Ms. Celestine Obuadey, Accountant**

She is a part-qualified student writing the final examinations of the Institute of Chartered Accountant, Ghana. Prior to becoming the Accountant of HPC, she worked as an internal auditor at the University of Cape Coast for two years.

#### **Ms. Flora Asamoah, Quality Assurance Officer**

Ms. Flora Asamoah has a Bachelor of Science in Food Science from the University of Ghana, Legon. She previously worked as a regulatory officer with the Food and Drugs Authority as a Quality Assurance Executive.

### **BUSINESS ENVIRONMENT**

Ghana continues to enjoy relative peace and stability despite the hazards of the Covid-19 pandemic. The economy is faced with very few policy barriers to trade and investment. Previously, the economy was strengthened by a relatively sound macro-economic management and a competitive business environment, but in recent months the system has suffered a recession due to the Covid-19. Recovery programs are underway to revitalize the economy yet the business environment for food processing and manufacturing industry looks unclear.

## **ECONOMIC PERFORMANCE**

The economic growth of Ghana's economy has been very slow due to the Covid-19 pandemic. It is estimated that the growth will accelerate strongly next year as domestic and external demand strengthen. In the second quarter of 2020 economic growth stood at 3.2% while inflation rate also moved up to 10.4% in September, 2020. Situations in 2021 is said to be better as most sectors of the economy have been given support in the form of stimulus package by the government of Ghana to help bounce back after the impact of Covid-19 and the 2020 general elections.

## **IMPACT OF COVID-19 PANDEMIC**

COVID-19 has greatly impacted the company's operations and financial performance within the year. The pandemic resulted in a drastic fall in the demand for HPC products due to the economic uncertainty and changing consumer behaviour driven by Covid-19. Restriction on movement and social distance discouraged most consumers from patronising goods and services. Also, the company's supply chain was disrupted due to government restriction on movement. Suppliers were not able to meet the company's demands for raw material for production. Finally, the pandemic has led to an increase in the cost of production and other inputs due to market volatility and Products unavailability.

## **ADDITIONAL INFORMATION**

### **FUTURE STRATEGIC OPTIONS OF HPC**

The focus of HPC for 2022 and beyond is to sustain the growth path and improve its operational capacity to enhance market presence and market share to create value and profitability for its shareholders. In this light, management of the company has made a lot of restructuring to accommodate the new highlights on growth. The company is also focusing on expanding further, their market to other West African Countries like Togo, Nigeria and Ivory Coast and controlling the operational cost to ensure optimisation and efficiency.

The board has asked the CEO of HPC to investigate two investment opportunities that have just arisen from a survey report presented to the board by Patrick Swatson, the Trade Consultant, for its consideration. Both investments are in neighboring countries, so the investment would be consistent with the company's strategic ambition to expand its business into other countries. To review these investment opportunities, a pre-tax cost of capital of 23% should be used for both options. For financing reasons, these two investments options should be considered as independent projects.

#### **Investment option 1**

There is an opportunity to acquire several retail outlets in Nigeria. These retail outlets specialise in the supply of processed fruits for senior high schools. Profit margins for the processed fruits tend to be high and currently there are few other distributors of this type of fruit juice. The retail outlets of HPC currently operating in Ghana do not stock supplies of this specialised processed fruits. HPC could acquire these retail outlets for an initial payment of GH¢2 billion followed by a further investment of GH¢ 900,000,000 to upgrade production at the end of the first year of operations.

The following projected probabilities of pre-tax net cash flows, converted into cedis at the expected exchange rate have been provided:

<b>Year</b>	<b>Cash flow (GH¢)</b>	<b>Probability</b>
1 to 10	600,000,000 per year	0.5
	900,000,000 per year	0.3
	400,000,000 per year	0.2

These cash flows will only be achieved if the investment to upgrade the production is carried out and do not reflect the level of expected performance of the target acquisition under its current ownership.

#### **Investment option 2**

HPC is considering setting up several new retail outlets in Togo, where it believes it can rapidly become a market leader. Togo has a developing economy, and many large-scale malls are currently underway. The Government of Togo forecasts that there will be further development in urban areas in the country over the next 10 years. There are several well-established competitors in Togo. To set up new retail outlets in Togo would involve an initial capital outlay of GH¢ 3 billion and the forecast pre-tax net cash flows, converted into cedis at the expected exchange rate, are as follows:

<b>Year</b>	<b>Cashflow (GH¢)</b>
1-5	480,000,000 per year
6-10	680,000,000 per year

The Chief Executive Officer who has nurtured the company from its inception until now is concerned about the possibility that with the expansion to other countries, she will have to further divulge power because of the size and complexity of HPC. This she reasons would influence the extent to which decision-making, planning and control are centralised or decentralise ('devolved'). "It is difficult to control a large and complex entity from head office, without delegating substantial amounts of authority to divisional managers" she said.

The Board Chairman, Mawunyo Kpo, who is a friend to the CEO's father, has expressed an interest in pursuing a marriage relationship with the CEO. The CEO is divorced and has remained unmarried for 15 years.

The Board Chairman is a business partner of Patrick Swatson, the Trade Consultant and will lead the business expansion project when it is finally approved by the Board.

**Note: Discount factors at 23%**

Year 1:	0.813
Year 1-5:	2.803
Year 1-10:	3.799

## QUESTION ONE

As part of a review of the strategic position of HPC and its move to expand the business, management identified its major stakeholder groups, their power and their expectations that could either fast track or delay the implementation of the decision. These major stakeholder groups are the employees, farmers, regulatory authorities and customers.

**Required:**

Using two matrices of approach to stakeholder mapping, discuss and show (with diagrams) the relative significance of stakeholder groups identified and their real and potential influences over HPC and its expansion strategies. (*Use the stakeholder position/importance matrix and the stakeholder power/interest matrix -Mendelow matrix.*) (10 marks)

## QUESTION TWO

HPC exists in an external business environment that appears to be either favourable or unfavourable to its present survival and future success. The influences (current influences and possible future influences), of the business environment of HPC need to be analysed to ensure that none are over-looked.

**Required:**

- a) Using ***PESTEL analysis***, discuss HPC's external business environment that appears to be either favourable or unfavourable to its present survival and future success. (8 marks)
- b) Discuss **TWO (2)** limitations of ***PESTEL*** as a technique in analysing the environmental influences of HPC. (2 marks)

## QUESTION THREE

Consistent with its strategic ambition to expand its business into other countries, HPC is considering expanding to Nigeria and Togo.

**Required:**

Using ***Porter's six principles of strategic positioning***, analyse how HPC can achieve sustainable competitive advantage if it decides to expand the business to Nigeria and Togo. (10 marks)

## QUESTION FOUR

The Chief Executive Officer is concerned that with the expansion of the operations of HPC to other countries, she would further have to divulge authority and power to other Managers because of how the company would grow in size and complexity.

**Required:**

Explain to the CEO why HPC's decentralised system of internal organisational relationship is preferable to a centralised system. (10 marks)

## **QUESTION FIVE**

In their Annual Business Review meeting, the Board of HPC discussed a report on Internal Controls and Risk Management, presented by the Internal Auditor. The Board Chairman in his comments mentioned that he would have been more comfortable with a Risk Management report categorised according to the Turnbull Report.

**Required:**

With reference to the Turnbull Report and the comments made by the Board Chairman, write a report discussing **EIGHT (8)** categories of business risks faced by HPC and recommendations to mitigate the identified risks. **(20 marks)**

## **QUESTION SIX**

- a) For the two strategic development options being considered by HPC, compute
  - i) the Net Present Value of Option 1.
  - ii) the Net Present Value of Option 2.
  - iii) the Net Present Value for the worst-case outcome for Option 1. **(10 marks)**
- b) Discuss **THREE (3)** potential benefits and **TWO (2)** difficulties for HPC of undertaking each of the strategic development's options. Your answer should include an evaluation of the calculations of the profitability index of each option. **(10 marks)**

## **QUESTION SEVEN**

In reference to Ghana's Code of Best Practices in Corporate Governance, discuss **FOUR (4)** key issues that could determine how well or badly HPC is governed taking into consideration the intention and business relationship of the Board Chairman. **(10 marks)**

## **QUESTION EIGHT**

The Accountant advised the CEO that to strengthen governance, the Board should concern itself with the establishment of strong internal control system. Failures or weaknesses in internal controls will have adverse consequences for HPC's finances, financial reporting, operational efficiency and effectiveness, or regulatory compliance.

**Required:**

Write a paper, explaining **FIVE (5)** factors to the Board the nature of internal controls that could be instituted by HPC to strengthen governance. **(10 marks)**

**(Total: 100 marks)**

## SOLUTION TO QUESTIONS

### QUESTION ONE

The major stakeholder groups identified are the employees, farmers, regulatory authorities and customers.

#### Employees

HPC employs 1,000 workers and this is **significant** and **very powerful**. HPC operates in an industry that has the highest share of employment in Africa. The UNIDO report found micro agro-processing firms employ about 48% of the total agro-processing labour force. This is therefore reflective of the importance of the industry for employment, income, and inclusive growth. Their **position** on the expansion drive of HPC is not stated. However there is **no reason to conclude that they oppose** the move by HPC. Their interest can be said to be **very high**.

		Importance of the Employee		Interest of the Employee			
		Oppose	Low +1	high +5	Oppose	Low +1	high +5
Position on Expansion	Oppose				Oppose	Weak	
	Support		Supporter		Power of the Customer	Strong	Key player
Support			Support				

#### Farmers

HPC purchases over 1,750 tonnes of raw fruit products from the fruit growers on a monthly basis. This linkage between the small fruit cultivators and the processing company is beneficial as the farmers benefit from prompt payment for their supplies and a higher rate per kilo of produce, compared to other competing buyers in the area, which ensures a continued supply of raw materials to its factories. This is **significant** and **very powerful**. Their **position** on the expansion drive of HPC is not stated. However there is **no reason to conclude that they oppose** the move by HPC. Their interest can be said to be **very high**.

		Importance of the Farmer		Interest of the Farmer			
		Oppose	Low +1	high +5	Oppose	Low +1	high +5
Position on Expansion	Oppose				Oppose	Weak	
	Support		Supporter		Power of the Customer	Strong	Key player
Support			Support				

#### Regulatory Authorities

The continued expansion of Ghana's agro-processing industry may be attributed to regulatory reform, tax incentives, market linkages, investments into new fruits

varieties, and public-private partnerships. Their **position** on the expansion is **very high** and do **not oppose** HPC's expansion drive. Their influence can be rated as **very significant** and **very powerful**.

		Importance of the Regulator		Interest of the Regulator		
		Low +1	high +5	Oppose	Low +1	high +5
Position on Expansion	Oppose			Oppose	Weak	
	Support			Power of the Customer		Key player
	Support			Support	Strong	

### Customers

One of the core values of HPC is relationship building and their number one priority is its customers. They strive to work hand in hand with clients to meet their needs and expectations. Their influence can be rated as **very significant** and **very powerful**. Their position on the expansion is **high** and do **not oppose** it.

		Importance of the Customer		Interest of the Customer		
		Low +1	high +5	Oppose	Low +1	high +5
Position on Expansion	Oppose			Oppose	Weak	
	Support			Power of the Customer		Key player
	Support			Support	Strong	

[4 points @ (1.5 marks for each discussion and 1 mark for each diagram) =10 marks]

### EXAMINER'S COMMENTS

This question required the candidates to use stakeholder mapping to discuss the significance of stakeholder groups – employees, farmers, regulatory authorities and customers – and their potential influence on HPC Limited.

The question was popular and most of the candidates did well. They were able to identify all the stakeholders as key players.

## QUESTION TWO

- a) HPC's external business environment using PESTEL analysis

### **Political environment**

Ghana continues to enjoy relative peace and stability despite the hazards of the Covid-19 pandemic. This is conducive to business despite the combined effects of COVID-19 and the 2020 general elections.

### **Economic environment**

The economic growth of Ghana's economy has been very slow due to the Covid-19 pandemic. It is estimated that the growth will accelerate strongly next year as domestic and external demand strengthen. Looking into the future, HPC's business outlook looks bright.

In the second quarter of 2020 economic growth stood at 3.2% while inflation rate also moved up to 10.4% in September, 2020. This trend could affect the price of HPC's products and might affect demand.

Situations in 2021 is said to be better as most sectors of the economy have been given support in the form of stimulus package by the government of Ghana to help bounce back after the impact of Covid-19 and the 2020 general elections. This could cushion HPC to mitigate the impact of Covid-19 and the 2020 general elections.

### **Social and cultural environment**

Awareness creation on healthy eating, establishment of shopping malls in Accra and big cities across Ghana, growing middle class and booming street vendors producing fruit smoothies for consumption contributed to the high demand.

Additionally, there has been a steady increase in new hotels with increased demand for fresh fruits and fresh fruit juices and as a result high demand for fruits such as oranges, pineapple, mangoes, bananas, coconut and watermelon in the domestic market

### **Technological environment**

Indigenous technology adopted among the companies in the industry has resulted in reduced efficiency and productivity, compared to the multinational agro-processing companies who are able to rely on modern and more efficient technology in their operations. An efficient technological method if used will result in an increase in technology.

The labour intensive and time-consuming features of the indigenous technology often hinder the opportunity to scale up operations, creating a scope for policy in this area.

Choice of technology is often poor, since obsolete and brand-new processing equipment are often used together in the same processing plant. There is an absence of skilled technicians needed for maintenance and repair of spare parts.

### **Ecological influences**

The use of packaging materials that are not environmentally friendly.

- ❖ PET bottle (• Cheap, easy to handle and can be recycled • Not environmentally friendly).

- ❖ Tetra Pack (• Not easily available and expensive • Not environmentally friendly • Can be recycled).
- ❖ Stand up pouch (• Not easily available and expensive • Not environmentally friendly • Can be recycled).

### **Legal environment**

The recent introduction of the 50% reduction in benchmark port value on selected imports items (including fruit juice) is set to worsen the plight of local fruit juice processing companies, due to imported products benefiting from lower tariffs. This makes imported products more competitive than those produced locally. This has been a major concern for the local processors, since this will increase the influx of cheaper imported goods onto the domestic market.

**(6 points @ 1.33 marks each = 8 marks)**

**b) Limitations of PESTEL as a technique in analysing the environmental influences of HPC**

- It is easier to use PESTEL analysis to identify environmental influences in the past and present. It is not so easy to identify the environmental influences that will have the biggest influence in the future.
- It is a method of identifying environmental influences, by providing a framework for analysis. It does not provide an assessment of environmental influences.
- It is used for qualitative analysis, but not for quantification. A manager using PESTEL analysis might need to use his (subjective) judgement to decide which environmental factors are more important than others.

**(Any 2 points @ 1 mark each = 2 marks)**

### **EXAMINER'S COMMENTS**

This question was in two parts. Part A required the candidates to use PESTEL analysis HPC's external business environment. Then second part demanded an explanation of two limitations of PESTEL analysis.

The candidates did well in the first part of the question. They were able to identify relevant PESTEL factors based on the case. The second part on the limitations of PESTEL technique was poorly answered.

### **QUESTION THREE**

Strategic positioning means doing things differently from competitors, so HPC should offer something unique to customers, so that customers will be prepared to pay a higher price to acquire the unique value combination that their product offers. Below are the ways HPC can achieve sustainable competitive advantage using Porter's six principles of strategic positioning:

**Principle 1:** The strategic goal for HPC should be to achieve a superior long-term return on investment. HPC should not select as its strategic goal any other objective, such as maximising sales volume or maximising market share, on the

assumption that high profits will result from this. Maximising sales or market share does not necessarily provide a superior return on investment.

**Principle 2:** HPC's strategy must offer a unique value proposition for the customer. This is a combination of price and benefits that competitors do not (and cannot) offer. The value proposition might be for customers in the entire market, or for customers in a segment or niche of the market.

**Principle 3:** There should also be a distinctive value chain. HPC should perform similar activities to competitors, but in a different way that offers customers more value.

**Principle 4:** HPC's strategy will involve some trade-offs. This means that by selecting to expand into other countries, HPC inevitably chooses not to grow internally or in Ghana.

**Principle 5:** All the different elements in the strategy and in the value chain should link together and reinforce each other.

**Principle 6:** There should be continuity of strategic direction. Having chosen its strategies and the direction it wants to take its businesses, HPC should apply the strategy consistently. It should avoid the temptation of changing strategy every time a new threat emerges.

**(6 points @ 1.66 marks each = 10 marks)**

#### **EXAMINER'S COMMENTS**

This question required the candidates to use porter's six principles of strategic positioning to analyses how HPC can achieve sustainable competitive advantage if it decided to expand the business to Nigeria and Togo. This was popular but the performance was poor because the candidates deviated by producing answers on porter's diamond.

#### **QUESTION FOUR**

HPC's decentralised system of internal organisational relationship is preferable to a centralised system because of the following reasons;

- In a centralised organisation, senior management retain most (or all) of the authority to make the important decisions. In a decentralised organisation, the authority to take major decisions is delegated to the management of units at lower levels in the organisation structure, such as SBU managers, and divisional managers. The choice between a centralised and a decentralised organisation depends to some extent on the preference of senior management.

- In many situations, junior ('local') managers have better knowledge than senior management about operational conditions. Tactical and operational decisions are probably better when taken by local management, particularly in a large organisation.
- Giving authority to managers at divisional level and below helps to motivate the management team. Decisions can be taken more quickly at a local level, because they do not have to be referred to head office.
- In a large and complex organisation, many decisions have to be made – probably too many for senior management at head office.
- The appropriate amount of centralisation or decentralisation for an entity will depend on the circumstances. It has already been suggested (Greiner's growth model) that as it gets larger, an entity might go through periods of centralisation, decentralisation and coordination between local management and head office. With the expansion project envisaged by HPC, authority has to be divulgued to make for effective decision making process.

**(5 points @ 2 marks each = 10 marks)**

#### **EXAMINER'S COMMENTS**

This question was on why HPC's decentralized system of internal organization relation is preferable to a centralized system. Although this question looks straight forward, most candidates performed poorly.

#### **QUESTION FIVE**

##### **Business risks and Recommendations to mitigate the identified risks**

- **Market risk.** Market risk is the risk from changes in the market price of key items, such as the price of key commodities. Market prices can go up or down, and a company can benefit from a fall in raw material prices or incur a loss from a rise in prices. HPC might be able to pass on higher prices of raw materials to the customer by raising the prices for its own goods or services. However, if it puts its prices up, there might be a fall in total demand from customers. Higher prices, leading to falling sales volume could result in lower profits or losses. HPC should therefore sustain the Out grower system and motivate farmers to supply raw materials consistently and at a stable price.
- **Credit risk.** Credit risk is the risk of losses from bad debts or delays by customers in the settlement of their debts. HPC gives credit to farmers to enable them buy inputs to cultivate their land. This might not be very significant. However, all companies that give credit are exposed to credit risk. The size of the credit risk depends on the amount of receivables owed to the company, and the 'credit

'quality' of the customers. HPC should device a means to recover credit given to farmers, perhaps by deducting from payment for their produce.

- **Liquidity risk.** Liquidity risk is the risk that the company will be unable to make payments to settle liabilities when payment is due. It can occur when a company has no money in the bank, is unable to borrow more money quickly, and has no assets that it can sell quickly in the market to obtain cash. Companies can be profitable but still at risk from a liquidity shortage. HPC should institute effective cash flow management system to mitigate the potential for a liquidity risk.
- **Technological risk.** Technological risk is the risk that could arise from changes in technology (or inadequacy of technological systems in use). When a major technological change occurs, companies might have to make a decision about whether or not to adopt the new technology. If they adopt the new technology too soon, they might incur higher costs than if they waited until later. If they delay adopting the new technology, there is the risk that a competitor will take advantage, and use the technology to gain market share. HPC is in competition with large companies that could afford to invest in more efficient technology. HPC should get ahead of the competition by investing in new methods of production using technology.
- **Legal risk.** Legal risk, which includes regulatory risk, is the risk of losses arising from failure to comply with laws and regulations, and also the risk of losses from legal actions and lawsuits. The recent introduction of the 50% reduction in benchmark port value on selected imports items (including fruit juice) is set to worsen the plight of local fruit juice processing companies, due to imported products benefiting from lower tariffs. This makes imported products more competitive than those produced locally. HPC should lobby government and advocate for its review before implementation or its abolishing
- **Health, safety and environmental risk** Health and safety risks are risks to the health and safety of employees, customers and the general public. Environment risks are risks of losses arising, in the short term or long term, from damage to the environment - such as pollution or the destruction of non-renewable raw materials. The risks faced by companies vary according to the nature of their business. Health and food safety is very essential in the food processing industry. HPC should ensure that the quality control system is top range to ensure good hygiene and safety.
- **Reputation risk.** Reputation risk is difficult to measure (quantify). It is the risk that a company's reputation with the general public (and customers), or the reputation of its product 'brand', will suffer damage. HPC should continue with its CSR to build its reputation.
- **Business probity risk.** Probity means honesty and integrity. Business probity risk is the risk of losses from a failure to act in an honest way. HPC might be exposed to this type of risk if it deals in smuggled raw materials. HPC might be tempted to deal with smugglers in order to increase sales of its products. HPC should focus on its mission and attain them without compromising on integrity
- **Derivatives risk.** They include commodity derivatives and financial derivatives. Derivatives contracts are contracts to buy and sell a quantity of commodities at a future date at a fixed price agreed in the contract. In most cases, the buyer and

seller of the derivative instrument do not intend to buy and sell the physical commodities. HPC must consider the implications before deciding to go into derivatives.

**(8 points @ 2.5 marks each = 20 marks)**

### **EXAMINER'S COMMENTS**

This question required the candidates to categorise business risks faced by HPC Ltd and make recommendations to mitigate the identified risks.

Most of the candidates did very well. They were able to identify relevant business risks except that a few of them could not explain measures to mitigate the identified risks.

### **QUESTION SIX**

**a)**

i) **Calculations for Option 1**

**Weighted EV calculations**

**Cash inflows**

	<b>Most likely</b>	<b>Best outcome</b>	<b>Worst outcome</b>	<b>Weighted average</b>
Annual cash flow	GH¢ 0.60 billion	GH¢ 0.90 billion	GH¢ 0.40 billion	
Discount factor, Years 1 – 10	3.799	3.799	3.799	
<b>PV</b>	<b>GH¢ 2.279 billion</b>	<b>GH¢ 3.419 billion</b>	<b>GH¢ 1.519 billion</b>	
Probability	0.5	0.3	0.2	
<b>Weighted average</b>	<b>GH¢ 1.140 billion</b>	<b>GH¢ 1.026 billion</b>	<b>GH¢ 0.304 billion</b>	<b>GH¢ 2.470 billion</b>

**Cash outflows and weighted average NPV**

	<b>Year</b>	<b>Amount</b>	<b>Discount factor</b>	
		<b>GH¢ billion</b>		<b>GH¢ billion</b>
Cash outflow	0	2.00	1.000	2.000
Cash outflow	1	0.90	0.813	0.732
				(2.732)
Weighted average of inflows				2.470
<b>Weighted average NPV</b>				<b>(0.262)</b>

ii) Calculation for Option 2

Year	Net cash flow GH¢ billion	Discount factor at 10%	PV GH¢ billion
0	(3.00)	1.000	(3.000)
1 - 5	0.48	2.803	1.345
6 - 10	0.68	0.996	0.677
<b>NPV</b>			<b>(0.978)</b>

iii) Worst outcome NPV

	GH¢ billion
PV of cash outflows	(2.732)
)PV of cash inflows (worst outcome)	1.520
<b>NPV (worst outcome) - negative</b>	<b>(1.212)</b>

ALTERNATIVELY

i) Option 1

	Most likely GH¢'billion	Best outcome GH¢'billion	Worst outcome GH¢'billion	Total GH¢'billion
Cash Inflows	0.6	0.9	0.4	
Probabilities	0.5	0.3	0.2	
	0.3	0.27	0.08	0.65
Annuity Factor @23%				3.799
PV of cash inflows				2.469
PV of cash outflows (2 + 0.732)				(2.732)
<b>NPV</b>				<b>(0.263)</b>

ii) Option 2

	Year 1 - 5 GH¢'billion	Year 6 - 10 GH¢'billion	Total GH¢'billion
Cash Inflows	0.48	0.68	
Annuity Factor @23%	2.803	0.996	
PV of cash inflows	1.345	0.677	2.022
Initial Outlay			(3.000)
<b>NPV</b>			<b>(0.978)</b>

iii) Worse Outcome NPV

	Year 1 - 10 GH¢'billion
Cash Inflows	0.400
Annuity Factor @23%	3.799
PV of cash inflows	1.520
PV of Initial Outlay	(2.732)
<b>NPV</b>	<b>(1.212)</b>

(10 marks)

**b) Option 1: Investment in Nigeria – acquire retail outlets**

Option 1 is an example of organic growth in a new country within which HPC has not previously operated retail outlets. It will be essentially the same business that HPC operates now, but located in Nigeria, with the risks that this might involve. This is a business that is sensitive to price wars, increases in variable costs and changes in demand. Organic growth is likely to be a much lower risk to HPC than growth through acquisitions, but the risk is increased by operating in a country which is unknown to it. However, the risk is lessened to a degree in that it is operating with familiar products and in a familiar industry environment.

However, HPC will need to ensure that staff operating in Nigeria would receive full training in HPC methods and procedures, and will need continual monitoring to ensure that their standards of efficiency and effectiveness match those of staff in Ghana.

A further consideration is that if there is a high level of competition in Nigeria which is likely to respond aggressively to entry by HPC into the market, and it must be prepared for aggressive competitor activities such as price wars.

This project involves the investment of GH¢ 2.9 billion and will offer a weighted average NPV of GH¢ 0.492 billion. On purely financial grounds, Option 1 in Nigeria is viable, although there is uncertainty about cash flow estimates. A worse scenario will not be good for HPC.

**Option 2: Acquisition of existing retail outlets in Country Z**

Option 2 also has a negative NPV on the basis of weighted average cash inflows, and so is not good. However, there is a higher investment cost for Option 2 at GH¢ 3 billion compared to Option 1 at GH¢ 2.9 billion.

Additional non-financial aspects of the venture which need to be considered are that the investment is inherently risky due to the many competitors in Togo. There is a growing shopping mall area of business and offers a potential area for HPC to increase its overall market share.

Advantages of organic growth works for HPC in this market too

**(Note:** Answers that include the following should be given full marks:

- HPC's corporate social responsibility
- Staff training and development
- Commitment to the highest ethical standards
- Environmental performance management
- Product integrity

**(10 marks)**

**EXAMINER'S COMMENTS**

This question was in two parts. The first part involved computation of net present value for options available to the HPC Limited. The second part involved discussion

of three potential benefits and two difficulties for HPC of undertaking each of the strategic development's options.

The poor performance by candidates in this question is a cause for alarm. They simply did not demonstrate prior knowledge of the principles and application of capital budget.

## QUESTION SEVEN

### **Code of Best Practices in Corporate Governance**

- **The role and responsibilities of the board of directors.** The board of directors should have a clear understanding of its responsibilities and it should fulfil these responsibilities and provide suitable leadership to the company. Governance is therefore concerned with establishing what the responsibilities of the board should be, and making sure that these are carried out properly. The intentions and potential conflict of interest situation might compromise good corporate governance practices at HPC.
- **The composition and balance of the board of directors.** A board of directors collectively, and individual directors, should act with integrity, and bring independence of thought and judgment to their role. The board should not be dominated by a powerful chief executive and/or chairman. It is therefore important that the board should have a suitable balance, and consist of individuals with a range of backgrounds and experience. The board has suitable balance but there is the potential for the Board Chair and the CEO to become too powerful.
- **Financial reporting, narrative reporting and auditing.** The board should be properly accountable to its shareholders, and should be open and transparent with investors generally. To make a board properly accountable, high standards of financial reporting (and narrative reporting) and external auditing must be upheld. The intentions and potential conflict of interest situation might compromise good corporate governance principles.
- **Directors' remuneration.** Directors work for a reward. To encourage their commitment to achieving the objectives of their company, they should be given suitable incentives. Directors' pay is an aspect of corporate governance where companies are frequently criticised. However, the intention of the Board Chairman might lead to conflict of interest situation and could lead to self-interest threat.
- **Risk management and internal control.** The directors should ensure that their company operates within acceptable levels of risk, and should ensure through a system of internal control that the resources of the company are properly used and its assets are protected. The risk of internal control override exists if the Board Chairman carries out his intentions.

- **Shareholders' rights.** Another aspect of corporate governance is encouraging the involvement of shareholders in the companies in which they invest, through more dialogue with the directors and through greater use of shareholder powers – such as voting powers at general meetings of the company. HPC should float shares to have major shareholders join the Board. This would minimise the risk of conflict of interest.
- **Disclosure.** Keeping shareholders and other stakeholders informed about the company, through disclosures that go beyond the publication of audited financial statements.

**(Any 4 points @ 2.5 marks each = 10 marks)**

#### **EXAMINER'S COMMENTS**

This question required candidates to discuss four key issues, based on Ghana's Code of Best Practices in Corporate Governance, that could determine how well or badly HPC was governed, taking into consideration the intention and business relationship of the Board Chairman.

The candidates performed well in this question. A few of them scored zero.

### **QUESTION EIGHT**

#### **Nature of Internal controls that can strengthen governance**

##### **Segregation of duties**

If possible a task should be divided between two or more individuals. In this way, one individual can check that the other has done his part of the work correctly. Segregation of duties is a common type of financial control, to prevent or detect accounting errors.

##### **Physical controls**

Physical controls are tangible controls, such as keeping money locked away in a safe, locking doors where access is restricted.

##### **Authorisation and approval controls**

These are controls that do not permit a transaction or an activity to go ahead without authorisation or approval at a suitable level of management.

##### **Management controls**

Management controls are controls applied by management systems or activities. Budgets and budgetary control are important examples of management control, designed to prevent or detect overspending.

**Supervision controls**

These are controls in which the work of employees is monitored closely by supervisors.

**Organisation controls**

These are controls that ensure that everyone in an organisation understands what his job is, and that there are reporting lines from junior staff to senior staff.

**Arithmetic and accounting controls**

These are controls to check that the arithmetic (and accounting) is correct. Control totals are an example of arithmetical financial controls

**Personnel controls**

These are controls over recruitment, selection and training, to ensure that good people are put into jobs and that they have the appropriate level of skill or experience to do the job well.

**(Any 5 points @ 2 marks each = 10 marks)**

**EXAMINER'S COMMENTS**

This question required the candidates to explain five factors to the Board the nature internal controls that could be instituted by HPC to strengthen governance.

The performance was average. Again, most of the candidates scored zero.

**(Total: 100 marks)**