CASE STUDY

Total marks: 100 **Time allowed:** 4:30 hours

Instructions:

1. Check that your question paper contains all the exhibits as mentioned in page 3. The consecutive page numbering may be found under the base line at the foot of each page.

2. Use the answer script provided by the Institute. Write your name, roll no., registration no. and name of the subject on the upper portion of the cover page of the answer script.

3. Candidates are asked not to write any particulars of identification in any other place of the answer script and additional pages if taken.

4. Questions must be answered in English.

5. The answer should be referenced to the relevant workings.

6. Answer script and additional page(s) taken to write answer, used or unused, must not be removed or taken away from the Examination Hall.

Requirements & Marks Allocation:

You are Sarwoar Ahmed and recently joined as senior consultant at Chowdhury Rashid & Co., Chartered Accountants (CRC). You report to Senior Partner of the Firm Mr. Rashid Chowdhury FCA. Recently your firm have been awarded with an advisory engagement with PaperCraft Limited (PCL). Your reporting partner Mr. Rashid has forwarded an email (**Exhibit-1**) to you which he received from Mr. Masum Ahmed, Managing Director of PaperCraft Limited, regarding several advisory related matters. Mr. Rashid has asked you to prepare a report covering all the requirements stated in the e-mail sent by Mr. Masum. Additionally, he forwarded some emails containing business reports and news (**Exhibit 7** and **Exhibi-8**) which he believes should be considered while preparing the report.

Requirements:

You are required to prepare a draft report for Mr. Rashid Chowdhury FCA which should comprise the following elements:

- ❖ An executive summary
- ❖ Your responses to the detailed requirements (a), (b) and (c) set out in Exhibit-1**.**
- ❖ State clearly any assumptions that you make.

Of the total marks, 10% are included for the relevant discussions of ethical issues within your answer to the requirements.

Marks Allocation:

All of the marks in the Case Study are awarded for the demonstration of professional skills, allocated broadly as follows:

Requirements	**Professional Skills**					**Total**
	Assimilating and using information	Structuring Problems and solutions	Applying Judgment	Conclusions and making recommendations	Integrative & multidisciplinary skills	
Executive Summary	3	4	3	3	2	**15**
Requirement (a) (i)	3	4	3	3	2	**15**
(ii)	3	3	2	2	0	**10**
Requirement (b) (i)	2	2	2	2	0	**8**
(ii)	4	3	2	2	2	**13**
(iii)	4	3	2	2	0	**11**
(iv)	2	2	2	2	0	**8**
Requirement (c) (i)	2	2	2	2	2	**10**
(ii)	2	2	2	2	2	**10**
Total	**25**	**25**	**20**	**20**	**10**	**100**

In planning your report, you should be aware that not attempting one of the requirements, including an executive summary, will have a significantly detrimental effect on your chances of success. In addition, as indicated above, all skills areas will be assessed under each element of your report.

You should be clear that marks are awarded for demonstrating your professional skills, not for reproducing facts from the case. To be successful, you will need to:

- Demonstrate your knowledge of the case material and make use of your analysis.
- Carryout relevant analysis of the problems and structure your proposed solutions.
- Apply your judgment based on the analysis that you have carried out
- Draw conclusions from your analysis and judgment in developing practical commercial recommendations.
- Ethical issues may cover the following topic-
  - Lack of professional independence or objectivity
  - Conflict of interest among stakeholders
  - Doubtful accounting or commercial practice or market competition or Market proximity
  - Inappropriate pressure to achieve a reported result.
  - Compliance of local laws and regulations
- Integrative & multidisciplinary skills may cover the following areas-
  - Depletion and wastage of natural resources and its impact on environment and climate change.
  - Impact on pollution, on the public health and productivity and on the national health budget.
  - Social impacts, e.g., social unrest for allowing use of alcohol, bar, etc.
  - Economic impacts, e.g., on employment generation and improvement in connectivity using ICT.

LIST OF EXHIBITS

List of persons in the Case and their Roles

SL.	Names	Roles
1	Sarwoar Ahmed (You)	Senior Consultant at CRC
2	Rashid Chowdhury FCA	Senior Partner at CRC
3	Masum Ahmed	Managing Director at PaperCraft Limited
4	Aman Ullah, FCA	Director of Finance & Accounts, PaperCraft Limited
5	Ghaffar Ali	Operations Director, PaperCraft Limited
6	Nasimul Hassan	Founder & Chairman of the Board, PaperCraft Limited
7	Nazmul Hasan	Director of Marketing, PaperCraft Limited
8	Shamima Nasrin	Director of Human Resource, PaperCraft Limited

<u>EXHIBIT</u> – 1

<u>E-MAIL</u>

From : Mr. Masum Ahmed, Managing Director, PaperCraft Limited
To : Mr. Rashid Chowdhury FCA, Senior Partner, CRC
Subject : Request for a report to the PCL Board on matters under advisory engagement.
Date : 16 July 2023

Dear Mrs. Chowdhury,

This is to notify you that your proposal and fees for Advisory Service has been approved in our last board meeting and PaperCraft board has agreed to appoint you as advisory of the company till 30 June 2024. You scope of works will includes among others:

- Assess and analyze business operations for formulating business strategies.
- Evaluation of strategic options and viability of financing for investment opportunities considering past performances & prospects of the company and related business issues. Assisting us in raising funds through initial public offering (IPO) of shares, Issuance of Bond and perform necessary evaluation of investment options, Risk Management, Governance, Due Diligence, Restructuring, etc.
- Review and advise on various Accounting, Tax, financial and internal control related issues of the company.
- Support on various regulatory and secretarial matters as and when solicited.

PaperCraft Limited (PCL) board has been reviewing our financial and business positions and discussing several strategic options available at hand. We need your analysis and advice on our financial positions and strategic alternatives. In connection to this matter, I am sharing a brief background of PCL and about its operations & plans **(Exhibit 2)**. I am also sharing the extracts of financial statements for the year ended 30 June 2023 (**Exhibit 3).** I am sharing a brief note on Bangladesh paper industry which I read recently, and I believe it may be helpful for preparing your report (**Exhibit 4**). In addition, you will receive emails from our Finance Director (**Exhibit 5**) and Operations Director (**Exhibit 6**). We expect you to consider the relevant information provided in **Exhibits 7 & 8** for your analysis and to draw your conclusion and recommendations for the requirements stated below.

We expect a **draft report** from you addressing PCL board. Report should include an ***Executive Summary*** and cover:

(a) (i) Evaluation of financial and non-financial performances of PaperCraft and its current financial position. Consider the required adjustments for reporting and compliance issues stated in **Exhibit-5**.

(ii) Perform a SWOT analysis on PCL evaluating its Strengths, Weaknesses, Opportunities, and Threats.

(b) (i) Compare the Pros & Cons of investment options from **Exhibit-6.**

(ii) Based on your above analysis in (b)(i) and evaluation in (a)(i) & (a)(ii), recommend to the Board with justification(s), the best investment option to be executed for increasing shareholders' wealth and return.

(iii) Calculate the basic EPS and diluted EPS of PCL after determining the share price and number of shares to be issued if PCL plans to raise funds from IPO. Comment on the dilution impact on the existing shareholders.

(iv) Determine whether it will be feasible for PCL to invest in the strategic options by taking long term bank loan. Discuss the risks and benefits of both financing options and suggest the best financing option.

(c) (i) Comment on the ethical issues of PaperCraft's business and operations; and

(ii) Assess Sustainability of PCL's operations considering Human, Social, Economic and Environmental factors.

State the assumptions you have used and provide your workings as annexure(s) to the report.

I look forward to receiving your draft report on or before 22 July 2023.

Yours sincerely,
Masum Ahmed
Managing Director, PaperCraft Limited

<u>EXHIBIT</u> – 2

A brief note on PaperCraft Limited and its business operations.

Company Background

PaperCraft Limited (PCL) was incorporated in the year 2000 as a private limited company. The company was founded by Mr. Nasimul Hassan, Chairman of the board, who started his profession in trading of paper and paper-based products under another company. Soon Mr. Hassan decided to start his own company and subsequently founded PaperCraft Limited.

Since inception, PaperCraft was focused on trading of paper and paper-based products. It purchased paper from the paper mills and used to sell at wholesale market. Soon it realized it would have higher revenue if the product could be branded. Soon after that PCL started to brand its inventories as PaperCraft product. This helped PCL to differentiate itself from other companies dealing with the same products. PCL then focused on improving quality of the products it was dealing and accordingly negotiated with the manufacturing paper mills. Because of higher quality and branding, its demand increased significantly over the years.

In 2007, PCL set up its first paper mill in Gazipur which used to produce newsprint papers from recycled papers and other materials. However, as the demand for newsprint paper decreased over time, the mill was upgraded to whiteprint paper manufacturing plant. In 2016, PCL expanded its business by acquiring a small tissue manufacturing plant in Narayangonj. This plant is producing hygiene products. Both of the plants are operated as separate business unit and equipped with latest machineries for this industry. PCL has partnered with world best technology companies for upgradation and maintenance of its plants. PCL is currently aiming to achieve ISO certification for its plants.

The company have built its reputation in more than two decades by offering diversified products ranging from different types of Paper, Tissue & Hygiene portfolio. This has earned satisfaction and trust from both local and international customers. At present, PCL is selling its products across the country and exporting its product to over 20 countries. Furthermore, PCL is the preferred source of Government and commercial organization for paper and paper-based products.

Paper Producing Unit

Paper producing unit has installed capacity of producing 30,000 Metric Ton paper per year. Since its commencement of its commercial production, it has updated its capacity regularly to meet the rapidly growing local demands. This Unit produces a diversified product range from 20 GSM to 300 GSM of different grades of white writing & printing papers, newsprint, duplex board, liner paper, Kraft paper, Carbonless Paper, Coloured/ Offset Printing & Wrapping Papers, Colour Ledger Paper, Sticker Papers, Cigarette Tipping Papers, OGR Paper, Exercise Books, A4 Paper, Paper Sack, Art card, art paper and allied products. It also time to time produce stiffener Glassine paper, PP woven Bag, MG paper, Coted, uncoated Paper Board and all types of tissue etc. It also produces writing and printing paper for local consumption and also for printing textbook for National Curriculum and Textbook Board (NCTB).

Periodic renovation and modernization of the Plant machineries well foreseen by the skilled resources of home and abroad have helped the plant to remain in healthy condition even after decades. PCL’s firm commitment and success delivering high quality products and services to customers has been the major reason to attain and retain the leadership position sector of this country.

Tissue & Hygiene Item Producing Unit

PCL acquired its this business unit from Ahem Tissue Limited (ATL) in 2016. It became one of the largest basic tissue manufacturing factories with in a very short time due to growing popularity of tissue with fast changing urban lifestyle and elevation of living standards as a whole. PCL brands its product as “PaperCraft Tissue” which has become a trusted name among the consumers. In this unit, PCL produces facial tissue, toilet paper, paper towel, Kitchen napkin etc.

PLC strive towards product quality and customer Satisfaction by understanding & fulfilling customer expectations. This was the key factor in growth of hygiene product business and the advantage that it built over the years through wide and loyal distribution network across the country.

Mission & Vision

PCL is operating its business with the mission of "*Enabling Communication, Education and Business of the world by providing sustainable paper-based solutions*" and it has vision "*To be a world class paper company creating positive impacts for customers*".

Key Management

Most of the board members are family members of Mr. Nasimul Hassan, Founder and Chairman of the company. Records of the company shows following persons as member of the board and departmental heads.

Persons	Ownership %	Position at the board
Nasimul Hassan	60%	Chairman of the board
Masum Ahmed	20%	Managing Director
Nazmul Hasan	15%	Director of Marketing
Shamima Nasrin	5%	Director of Human Resource
Aman Ullah, FCA	0%	Director of Finance & Accounts
Ghaffar Ali	0%	Operations Director

Operational strategy

Current business model of the company includes importing pulp and raw materials as well as sourcing from local market where possible. These raw materials are processed in PCL plants to produced finished products. Major portions of the finished goods are distributed across the country through own distribution networks and sold to the retailing and specialized shops. Some small portions of Finished products are sold at bulk to the wholesale market and directly sold to corporate offices. In addition, 10%-15% of the finished products are exported to various countries. On special request, PCL also delivers customized and designed products to the corporate house. However, tailer product request is very small in quantity, but recent analysis shows trend will grow in future.

PCL is currently having problem in importing pulp due to foreign currency crisis the country is facing. PCL is currently supporting its operations by sourcing pulp from local vendors. However, quality of these pulps is inferior compared to the imported pulps. Furthermore, government duty has increased the import cost of the pulp leading to increase in paper manufacturing costs. This is expected to impact sales in upcoming years. In order to address the pulp related issue, PCL has partnered with local research institutes to find alternative source of raw materials. PCL is considering starting its own pulp production company.

Future plans

PCL plans to be the largest paper company of the country. It has plan to expand its business horizontally and vertically in both within and outside the country. Furthermore, it expects to be the most preferred paper brand in the country. It has plans to introduce new product lines in near future. It is currently considering entering in the greeting card market and sell premium paper-based gift items.

Financing strategy

PCL finance its business and assets from retained earnings and borrowings from loan & international banks. These sources are used for financing working capital and short-term loan. In case of new long-term financing, PCL plans to raise fund by issuing shares in IPO or taking loan from local and international bank. As the local borrowing cost is increasing, PCL is planning to focus on foreign borrowing.

Financial reporting

PCL prepares its financial statement in accordance with International Financial Reporting Standards (IFRSs). It maintains its financial year matching with government fiscal year July to June. Its financial year has recently ended, and accounting department has prepared its draft financial statements for the year ended 30 June 2023 (**EXHIBIT – 3**). The draft will be shared with its auditor Ariful Islam & Co., Chartered Accountants (AIC). AIC has been auditor of the company for last 10 years. Its partner Mr. Arif has been the engagement partner since the beginning. AIC is also helping PCL in tax planning, calculation of tax, filling of statutory and tax returns. On request of PCL board, AIC has provided internal audit support in few cases and implementation guidance for newly issued accounting standards. AIC fees has not changed in last four years. PCL Chairman has a good relationship with Mr. Arif and referred him as auditor to other companies. PCL is satisfied with its auditor and do not have intention to change in next few years.

HR Strategy

PCL believes in equal employment opportunities. At present PCL employs more than three thousand employees out of which 25% are female. These female employs are mostly works at the factory premises. Although the gender ratio is not at per but PCL plans to improve the gender balance in future. Gender ratio has decreased as female employee turnover has increased in last few years. Most of the employees are recruited through employee referral program and recruiting agencies. PCL has plans to introduce campus recruitment program in administrative positions. For its factory level positions, it plans to recruit from nearby localities. This will help to boost local employment opportunities. Furthermore, it will have positive impact on employee lifestyle as they will be able to work without moving away from families.

Corporate Social responsibility

Corporate social responsibility gives an opportunity to organizations to work towards the betterment of the society and make it a better place to live. Since the inception, PCL is committed to serve the community as well the country as a whole and the year under review is no exception. PCL has always been the front-runner to associate itself with various welfare functionalities specially for the betterment of the poor and underprivileged. The company has undertaken various activities for the betterment of the society. PCL spent around 15 million Taka for CSR activities just in 2023. Its CSR activities includes:

- PCL has pledged to educate the poor children of a particular village.
- Engaged to help the underprivileged student and their physical and mental health.
- Partnered with medical college & institutes for medical camps for students from rural schools.
- Provided educational materials and scholarships for students all over the country.
- Sponsored various sports tournaments and sports teams.

Environmental policy

PCL is committed to run its operations by following environment friendly, ensuring continual improvement in the utilization of resources and prevention of pollution or degradation of the environment. In pursuit of this, the Company follows the policy to:

- Comply with all environmental related legislations and regulations of this country.
- Conserve mother nature by adopting environmentally safe production processes.
- Ensure appropriate treatment of all effluents prior to discharge.
- Create and maintain awareness on environmental issues within the Company.
- Ensure waste management system runs through continuous upgradation process.

Health & Safety policy

The occupational health and safety for all related persons as well as for its employees are of the utmost importance to PCL. It has developed comprehensive policies and procedures in relation to occupation health, safety, and welfare policies. PCL has introduced a full code of conduct for its employees as per the provision of the common law, various codes, and regulations of all employed persons. The company ensures, as far as reasonably practicable, the health, safety, and welfare of its employees and associated persons. It also aims to ensure that people who aren't its employees (i.e., visitors, participants) are not exposed to health or safety risks. As per the health & safety policy, PCL is required to:

- identify and reduce risks in the workplace.
- provide and maintain safe systems at workplace.
- provide and maintain equipment and substances in a safe condition.
- provide facilities in a safe and healthy condition for the welfare of employees.
- provide adequate information, instruction, training, and supervision.
- maintain our environment and facilities in a safe condition.
- maintain accurate and up-to-date records about the health of employees and volunteers including information about accidents and incidents.
- develop and implement policies and procedures about working in the human resources safely.
- consult with employees about safety issues.
- provide and share adequate information with the employees regarding health & safety issues.

EXHIBIT – 3

Summary and Extracts of Financial Statements of the PaperCraft Limited

Statement of Financial Position
As of 30 June 2023

	30-Jun-23	30-Jun-22
Assets		
Non-current assets		
Property, plant and equipment, net	29,933,268,310	22,354,998,136
Intangible Assets, net	203,132,105	196,028,113
Right-of-use assets	19,881,667	35,316,991
Capital work-in-progress	821,806,406	1,124,398,926
Investment	344,500,000	344,500,000
	31,322,588,488	**24,055,242,166**
Current assets		
Inventories	10,750,871,244	10,224,836,983
Trade and other receivables	1,319,039,957	996,866,933
Advances, deposits, and prepayments	1,381,025,341	1,542,189,864
Cash and bank equivalents	536,818,927	541,317,599
	13,987,755,469	**13,305,211,379**
Total assets	**45,310,343,957**	**37,360,453,545**
EQUITY AND LIABILITIES		
Capital and reserves		
Share capital (FV @ 10)	4,520,747,010	4,520,747,010
Revaluation reserve	8,709,246,925	2,998,673,401
Retained earnings	3,761,579,721	3,355,024,615
	16,991,573,656	**10,874,445,026**
Non-current Liability		
Long term borrowings	17,387,736,934	16,996,071,544
Lease Liabilities	-	269,871,765
Deferred tax liability	1,422,507,425	1,210,153,243
	18,810,244,359	**18,476,096,552**
Current liabilities		
Long term borrowings-current portion	2,596,577,205	2,803,931,499
Short term borrowings	5,191,758,021	3,425,208,583
Trade and other payables	1,558,427,347	1,488,323,381
Provision for expenses	1,510,435	67,266,891
Income tax provision	160,252,934	225,181,613
	9,508,525,942	**8,009,911,967**
Total liabilities	**28,318,770,301**	**26,486,008,519**
Total equity and liabilities	**45,310,343,957**	**37,360,453,545**

Statement of Changes in Equity
As of 30 June 2023

Particulars	Share Capital	Revaluation Reserve	Retained Earnings	Total Equity
Balance as on 01 July 2021	4,520,747,010	3,023,446,352	2,829,558,693	10,373,752,055
Transfer to Retained Earnings	-	(24,772,951)	24,772,951	-
Dividend Payment	-	-	(33,854,166)	(33,854,166)
Total Comprehensive Income	-	-	534,547,137	534,547,137
Balance as on 30 June 2022	**4,520,747,010**	**2,998,673,401**	**3,355,024,615**	**10,874,445,026**
Transfer to Retained Earnings	-	(17,467,172)	17,467,172	-
Dividend Payment	-	-	(271,114,647)	(271,114,647)
Total Comprehensive Income	-	5,728,040,696	660,202,581	6,388,243,277
Balance as on 30 June 2023	**4,520,747,010**	**8,709,246,925**	**3,761,579,721**	**16,991,573,656**

PaperCraft Limited
Statement of Profit or Loss and Other Comprehensive Income
For the year ended 30 June 2023

	30-Jun-23	30-Jun-22
Revenue, net	14,609,357,421	12,067,714,190
Cost of sales	(11,683,899,629)	(9,568,034,401)
Gross profit	**2,925,457,793**	**2,499,679,789**
Administrative expenses	(456,837,667)	(478,618,630)
Selling & distribution expenses	(258,744,617)	(256,098,753)
Finance costs	(1,296,005,232)	(1,211,931,443)
Profit before distribution of WPP & WF	**913,870,277**	**553,030,963**
Workers' profit participation & welfare fund	(45,693,514)	(27,651,549)
Profit before tax	**667,828,273**	**525,379414**
Current tax (expense)/income	(172,775,897)	2,075,508
Deferred tax (expense)/income	(35,198,285)	7,092,215
Profit after tax	**660,202,581**	**534,547,137**
Other comprehensive income		
Gain on revaluation of land	5,905,196,595	-
Less: Related tax	(177,155,899)	-
Comprehensive income for the year	**5,728,040,696**	-
Total Comprehensive Income	**6,388,243,277**	**534,547,137**

<u>Notes to the financial statements</u>

		2023	2022
Note-01	**Revenue**		
	Paper product	6,136,238,285	4,585,731,392
	Tissue & Hygiene product	8,473,119,136	7,481,982,798
		14,609,357,421	**12,067,714,190**
Note-02	**Revenue by source**		
	Local sale	13,052,736,365	10,752,092,560
	Export sale	1,556,621,056	1,315,621,630
		14,609,357,421	**12,067,714,190**
Note-03	**Cost of Revenue**		
	Paper product	4,673,559,852	3,348,812,040
	Tissue & Hygiene product	7,010,339,777	6,219,222,361
		11,683,899,629	**9,568,034,401**

Summary of 5 Year Financial Information

Figures in million BDT

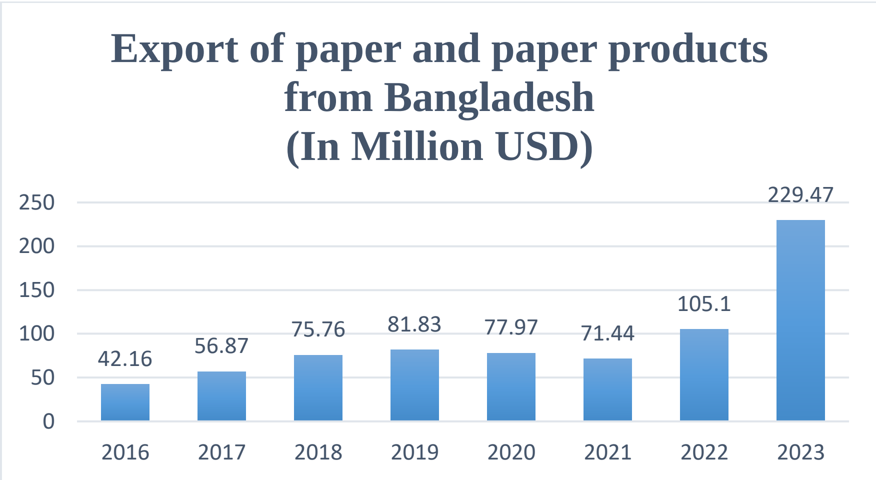
Key Financial Figures	**2023**	**2022**	**2021**	**2020**	**2019**
Revenue	14,609	12,068	11,107	14,351	14,067
Gross Profit	2,925	2,500	2,441	2,729	2,497
Profit Before Tax	668	525	440	518	524
Profit After Tax	660	535	372	380	482
Shareholder's Equity	16,992	10,874	10,373	10,052	10,143
Total Assets	45,310	37,360	36,443	39,242	32,581
Total Current Assets	13,988	13,305	14,082	18,793	17,098
Total Current Liabilities	9,509	8,010	9,234	16,266	15,581
Total Non-Current Liabilities	18,810	18,476	16,836	12,924	6,857

<u>EXHIBIT</u> – 4

<u>A brief note on paper industry in Bangladesh.</u>

The paper industry has become a successful sector in Bangladesh, and it has a great potential to become one of the country’s major foreign currency earners. After readymade garments (RMG) and leather industry, this sector is playing a vital role in our national economy. According to data available with the Bangladesh Paper Mills Association (BPMA) the country's paper-market size is around Tk 50 billion, registering an annualized growth of over 5.0 per cent in the recent times. Bangladesh Bureau of Statistics (BBS) divides paper into four main categories, namely writing paper, printing paper, newsprint, and packaging paper. According to BBS, Bangladesh produces 15 per cent writing paper, 35 per cent printing paper, 40 per cent newsprint and 10 per cent packaging paper.

Private paper mills are producing export-oriented paper products. After meeting the local demand, they have started exporting to 40 countries, bringing in large amounts of foreign currency. According to the Export Promotion Bureau (EPB), paper product exports totaled USD 229.47 million in the last fiscal year (2022-2023) and USD 105.1 million in the fiscal year 2021-2022.



(***Source: Export Promotion Bureau of Bangladesh***)

At present, there are about 105 paper mills in the country. Out of which nearly 80 paper mills are out of production. Rest of the miss has production capacity of 1.5 million (15 lakh) metric tons a year on average. There are three state-owned paper mills in the country, including Khulna Newsprint Mill (KNM) near Khalishpur, Pakshi North Bengal Paper Mills at Ishwardi in Pabna, and Karnaphuli Paper Mills (KPM) in Chittagong. Among them, only KPM, the largest paper factory in Bangladesh, is still in operation. It was established at Chandraghona of Chittagong district in 1953. But the mill is facing challenges due to shortages of raw materials used for manufacturing paper and pulp, such as bamboo and softwood from the local forests.

The amount of local production is sufficient to meet the demand for writing, printing, and newsprint purposes. There are no demands for imported paper for writing and printing. However, Bangladesh primarily imports all sorts of packaging papers for readymade garments, food items, medicines, and other consumer products, mostly from Japan, (South) Korea, China, Indonesia, and India, and some from America (USA) and European countries. The total amount of imports was 10 lakh (1 million) metric tons last year, and it is increasing this year.

Recently several private paper mills have started producing different types of export-quality soft tissue paper, security papers and paper cups, and they have started exporting those items. However, the industry is still dependent of import of raw materials i.e., the pulp in order to maintain the quality. In the past, the local paper mills used local raw materials, including softwood, bamboo, and other fibers.

Most of the paper mills uses two types of raw materials: pulps and recycled paper. Recycled papers are prepared from wastepaper and finished products from these recycled papers are of low quality. People used the locally made paper for writing and other work. They were not bothered about the quality. However, customer preference has changed over time, and they are now very conscious about the quality of products they buy.

In absence of quality pulp locally, paper mills import pulp to maintain quality standard of their products. Importing of raw materials has become a significant drawback in developing paper industry in Bangladesh. Due to the import, cost of production has increased. However, import of high-quality pulp has helped to increase production capacity of private paper mills

Although paper is used throughout the year, its demand is at the peak during November to January. Demand for paper increases in winter as school textbooks are printed for the new academic year, diary and calendar for new year, and new publications hit the market for annual book fairs in February across the country. Paper mills operates days and nights during this peak time to meet the demand. However, for the rest of the year, most paper mills remain shut or runs at the very lower capacity. This makes papermills to maintain cash flows and survive in this industry.

Participants of the paper industry are trying to introduce innovative technology in the production facilitates with the objective to protect nature and the environment. Many have introduced some environment-friendly technology to improve the quality of our locally made papers. It also helps to produce export-quality paper products and make huge profits. Paper mills are also developing technology to produce improved pulp locally to reduce production cost and avoid dependency on import. New technologies used in the paper industry include organic acid pulping fractionation of agricultural waste, potassium hydroxide-based pulping as a biorefinery concept, and fast-growing native species pulping under social forestry program.

The biggest wholesale market for paper in the capital is located at Naya Bazar in Old Dhaka. The place remains abuzz with traders from morning till late at night. People come here from different parts of the country to buy various types of paper and paper products.

The paper industry is no longer limited to writing and printing in this day and age. Along with other paper mills of the country, Paper Mills of Bangladesh has started exporting paper products in recent years. At present paper and paper-based products are exported to around 40 countries. Primary exported paper products include A3, A4 and legal-sized papers, exercise books and industrial paper, and hygiene products, like toilet paper, paper napkin, facial tissue, kitchen towel, pocket tissue, paper towel, clinical bed sheets and jumbo roll tissue.

In addition to the export demand, local demand for disposable paper cups, plates and boxes has become popular, especially among fast food outlets and street vendors. The market for paper cups and plates in Bangladesh is not that big. However, the usage of these environment-friendly paper products has started to increase. However, price is always a factor for increasing such demands. Due to the huge import duty on the raw materials, cost of paper products is high and having difficulties to compete with the plastic industry. The widespread use of plastic cups and polybags limits the demand for our environment-friendly paper products.

One of the positive aspects of the industry is that new entrepreneurs are investing a huge amount of money in the sector and implementing modern technology. Furthermore, foreign buyers are also coming to Bangladesh to import paper products because of the good quality. It is advisable to the new investors to obtain certain licenses life Fire Licenses, Environment Clearance Certificate (ECC) and membership with Bangladesh Paper Mills Association (BPMA) while setting up their business. The demand for sustainable products continues to increase, and paper manufacturing is no exception. In the future, it is expected to see an increased focus on using renewable energy sources, reducing waste and emissions, and sourcing raw materials responsibly.

Like every other business, paper industry is also impacted by digitalization. During the corona pandemic, entire world shifted toward digital communications. Corporate houses already shifted paper communications to email communications. Because of these demand for paper in corporate houses has decreased. Many educational institutions have been moving to digital examination system which does not require papers to write on. Due to change in preferences, readers now like to read their newspapers and books in digital devises. Newspaper companies are gradually moving to online version reducing the printed copies. Book and magazine publishers are also experiencing declining demand for their books and magazines. All these combines have decreased and further decreasing overall demand for paper. Furthermore, people are now concern about environment and carbon emission. They believe cutting trees for paper production is one of the reasons for deforestation and increase of carbon in air. There are active campaigns to reduce usage of paper in order to save the earth and its forests.

Despite the demand for writing paper is decreasing, its alternative uses like paper bags, paper cup, packing boxes, tissue etc. are rising. As paper is bio-degradable, it has become the most preferred alternative of single use plastic products. So, demand for paper can be compensated by its alternative uses.

<u>EXHIBIT</u> – 5

E-mail on Reporting and Compliance issues

From : Aman Ullah FCA, Director of Finance & Accounts
To : Mr. Rashid Chowdhury FCA, Senior Partner at CRC
Subject : Current Reporting and Compliance issues.
Date : 18 July 2023

I like to congratulations you on your reappointment for the advisory services to the company. I am sure we will be benefited greatly from the advisory engagement with your firm. I am writing today for your advice on some issues we have been facing. We have prepared our draft financial statements in **EXHIBIT-3** which will be shared with our auditors. We have come across with issues while preparing the draft financial statements which need to be incorporated in the final financial statements. We need your assistance to make corrections in the final financial statements.

Assessment of carrying value:
PCL has acquired a machine in 2021 for BDT 15 million with expected useful life of 10 years. However, during the year the machine was physically damaged due to an accident. Since then the machine is subject to regular maintenance to keep it operational. If replaced with a newer machine with advance technology, the existing machine will not fetch more than BDT 7 million taka.

VAT Related issue:
Recently our company went through a VAT inspection which identified that VAT amount for BDT 17,800,000 has not been deposited in last two years. VAT authority informed us to deposit the pending VAT in by 30 June 2023 in order to avoid 50% of the penalty amount. VAT authority charged penalty equal to undeposited VAT amount. We have deposited the amount VAT amount within the stipulated time. Penalty amount will be communicated with VAT inspection report will be finalized. Both pending VAT and penalty has not been accounted for in the financial statement. It is to be noted that tax authority does not allow regulatory penalty as tax deductible item.

Effect of foreign currency movement:
PCL has taken a loan of USD 100 million at 5% annual interest to construct its hygiene paper product manufacturing facility including building and machineries. Loan is repayable semi-annually in 10 years. At the time of obtaining the loan, exchange rate was 85 Taka per USD. However, due to devaluation of Taka, exchange rate became BDT 93/$ on 30 June 2022 & BDT 108/$ on 30 June 2023. Average USD rate during current year was BDT 105/$. Construction of facility building was completed in 3 years and on 31 March 2023. However, construction process was stopped for 3 months during the year. PCL incurred interest of USD 4,079,177 during the year which was recorded as finance cost using the historical exchange rate of BDT 93/$. We expect you to review the transaction from IAS 21 perspective.

Product supply agreement:
On 01 January 2023, PCL underwent a contract with Queen Enterprise Limited (QEL) for a year to supply 5,000 A4 paper rim per month. Supply is to be made at BDT 450 Taka per rim. In case PCL fails to supply as per agreement, QEL will deduct 10% of price undelivered products as penalty from security deposits. At the time of contract, PCL predicted 15% margin. However, after supplying three months, PCL noticed cost of production has increased and PCL is now incurring loss of 15 taka per rim. PCL has decided to continue supplying the product for rest of the contract period.

Inventory related issue:
Year-end inventory includes 50,000 A4 rim papers of 120 GSM which remains unsold since January 2022 due to reduced demand. Cost of these papers are 370 taka per rim. At prior year reporting date, demand for these papers were decreased significantly. It was expected that market will face only 280 Taka per rim. Accordingly prior year inventory has been adjusted. However, due to dollar crisis in the current, import was reduced and demand for these papers have increased. Accordingly, it has been estimated these 120gsm papers would fetch BDT 350 per rim.

Unpaid incentive:
During in PCL's annual picnic, managing director has announced that company is very happy with the performance of its employees. He also announced that all employees will receive 10% incentive bonus amounting to BDT 20,000,000. However, this incentive bonus has not paid yet. No provision has been made in the shared financial statements.

EXHIBIT – 6

E-Mail on Strategic investment options and financing alternatives

From : Mr. Ghaffar Ali, Operations Director, PaperCraft Limited
To : Mr. Rashid Chowdhury FCA, Senior Partner at CRC
Subject : Strategic investment options and financing alternatives.
Date : 18 July 2023

Greetings Mr. Rashid! Welcome to PCL Family. I am sure we will be benefited greatly from your knowledgeable and expert advises. I like to inform you that board has decided to expand its business and currently considering between two investment options which are not mutually exclusive. First option is to set up a new plant solely for corrugated cardboard and other paper-based packaging materials and second option is to acquire 75% shares of Papyrus Limited (Papyrus). For apprising the investment options, board requires the discount rate be determined considering applying Capital Asset Pricing Model (CAPM). In this regard following information has been gathered:

Risk Free Rate : 7.5%	Market Return : 12.5%	Current Market beta : 1.5

Option 1: Setting up corrugated cardboard plant (CCP):

PCL management is also considering setting up its third business unit for corrugated cardboard. Market analysis shows that demand for packaging materials is rising and could be a viable business opportunity. Finance department forecasted following cash flows for next in 10 years and expects to grow perpetually at 3% rate thereafter.

Year	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Investment	(5,000)	(80)	(85)	(90)	(95)	(98)	(105)	(110)	(115)	(120)	(122)
Net Profit	-	510	920	1,200	1,460	1,750	2,050	2,340	2,620	2,910	3,200
Free Cash Flow	(5,000)	430	835	1,110	1,366	1,652	1,945	2,230	2,505	2,790	3,078

Option 2: Acquisition of Papyrus

First option that the board considering is to acquire 75% shares of Papyrus Limited (Papyrus) which is engaged in production of pulps made of cellulose fibers. Papyrus produces pulps from local sources and sells to local paper companies. Papyrus has a very big production facilities and connection of sourcing raw materials for preparing pulps. PCL has been trying to enter this market for some time to ensure regular and cheaper pulp for its paper mills. Acquisition of Papyrus will enable PCL to enter into new market segment and control over required inputs. Furthermore, it will have readily available knowledge and market as founding shareholders will retain 25% shares. Current shareholders have agreed to transfer control of the Papyrus as it is currently facing liquidity shortage. As per the agreement, Papyrus will issue new shares at face value to PCL. Proceeds will be used to extinguish interest bearing liabilities. Papyrus Management has shared following extract of the financial statements.

Statement of Financial Position

In Million BDT

Assets		**Equity & Liabilities**	
Tangible assets	1,881	Share Capital (FV @ 10)	600
Other non-current assets	532	Retained earnings	283
		Total Equity	**883**
Non-current asset	**2,413**		
		Long Term Debt	898
		Deferred tax liabilities	239
Receivables	319	**Non-Current Liabilities**	**1,137**
Cash & Cash equivalents	131		
Inventories	455	Payables & accruals	708
Other financial Assets	86	Short term debt	676
Current asset	**991**	**Current Liabilities**	**1,384**
Total Assets	**3,404**	**Total Equity & Liabilities**	**3,404**

Statement of Profit or Loss

In Million BDT

Revenue	1,238
Cost of Revenue	(1,113)
Gross Profit	**125**
Admin Expenses	(94)
Non-operating income	14
PBIT	**45**
Interest expenses	(86)
Profit before tax	**(41)**
Tax @ 30% or PBT or 1.3% of Revenue	(16)
Net profit	**(57)**

<u>Post-acquisition Information relevant to Papyrus:</u>

Equity in capital (post acquisition) : 100%	Perpetual growth rate (after 2027) : 4%

Papyrus Limited

Forecasted Free Cash Flows (in Million BDT)

Item	**2023 A**	**2024 E**	**2025 E**	**2026 E**	**2027 E**	**2028 E**
Earnings Before Interest & Tax	45	66	88	102	138	144
Net Interest Expense / (Income)	86	18	12	10	12	14
Earnings Before Interest	**(41)**	**48**	**76**	**92**	**126**	**130**
Marginal Tax Rate at 30% or minimum tax	16	18	23	28	38	39
Earnings After Tax	**(57)**	**30**	**53**	**64**	**88**	**91**
Depreciation	32	28	31	90	130	130
Amortization of Intangibles	-	-	8	8	8	8
Change in Net Working Capital	(146)	553	230	280	300	180
Capital Expenditures	(186)	-	(35)	(250)	(200)	(50)
Unlevered Free Cash Flows	**(357)**	**611**	**287**	**192**	**326**	**359**

Financing options:

PCL is planning to finance the selected investment option(s) either by issuing new shares through IPO or taking a bank loan. First financing strategy is enlisting with stock exchanges and issue new shares through IPO. It plans to issue shares at 400% premium subject to approval of Bangladesh Securities & Exchange Commission (BSEC). BSEC consider the NAV, EPS, and sectoral Market PE ratio, etc. while approving the premium rate. The market capitalization of all securities listed in DSE Ltd. as on June 2023 was Tk. 7,720,780 million and market P/E Ratio for all listed securities is 14.31, whereas sectoral Market Capitalization was Tk. 375 million and sector's Price earnings (P/E) ratio was 51.98. Market price and EPSs of other comparable companies of the sector were as follows:

SL	Company	Face Value (BDT)	NAV (BDT) June 2023	Market Price (6-month average till June 2023) (BDT)	EPS on June 2023 (BDT)
1.	Sahara Paper Mills Limited	10	60	94	2.98
2.	Special Paper Manufacturing Limited	10	55	350	5.80
3.	Premier Paper Processing Limited	10	42	266	4.20
4.	Sheba Paper & Board Mills Ltd.	10	235	820	22.50

Based on the determined price, which is subject to approval from BSEC, PCL will issue new shares for the required funds for financing the project. Approximately 5% of the IPO proceeds will be used up in IPO process.

Second financing option is to take a long-term loan from the bank equivalent to the total investment to be made for the selected options. Under the new rules by Bangladesh Bank, which is effective from 01 July 2023, Banks will issue loan at SMART (Six Month Moving Average Rate of Treasury Bill) rate plus 3% corridor. Current SMART rate is 7% which is expected to increase to 8% in 2024 and 9% in 2025.

Year / Rate	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
5%	0.9524	0.9070	0.8638	0.8227	0.7835	0.7462	0.7107	0.6768	0.6446	0.6139
6%	0.9434	0.8900	0.8396	0.7921	0.7473	0.7050	0.6651	0.6274	0.5919	0.5584
7%	0.9346	0.8734	0.8163	0.7629	0.7130	0.6663	0.6227	0.5820	0.5439	0.5083
8%	0.9259	0.8573	0.7938	0.7350	0.6806	0.6302	0.5835	0.5403	0.5002	0.4632
9%	0.9174	0.8417	0.7722	0.7084	0.6499	0.5963	0.5470	0.5019	0.4604	0.4224
10%	0.9091	0.8264	0.7513	0.6830	0.6209	0.5645	0.5132	0.4665	0.4241	0.3855
11%	0.9009	0.8116	0.7312	0.6587	0.5935	0.5346	0.4817	0.4339	0.3909	0.3522
12%	0.8929	0.7972	0.7118	0.6355	0.5674	0.5066	0.4523	0.4039	0.3606	0.3220
13%	0.8850	0.7831	0.6931	0.6133	0.5428	0.4803	0.4251	0.3762	0.3329	0.2946
14%	0.8772	0.7695	0.6750	0.5921	0.5194	0.4556	0.3996	0.3506	0.3075	0.2697
15%	0.8696	0.7561	0.6575	0.5718	0.4972	0.4323	0.3759	0.3269	0.2843	0.2472

<u>EXHIBIT</u> – 7

<u>Environmental, Health and Ethical Issues in Paper Industry</u>

The environmental effects of paper are significant, which has led to changes in industry and behavior at both business and personal levels. With the use of modern technology such as the printing press and the highly mechanized harvesting of wood, disposable paper became a relatively cheap commodity, which led to a high level of consumption and waste. Paper usage has increased by 400 percent worldwide in the last 40 years. As a result, deforestation is on the rise. 35% of the cut wood is used to make paper. Paper waste accounts for 40 percent of the total waste generated worldwide each year. Wood pulp which is used to make paper produces large amounts of chlorinated organic compounds, including chlorinated dioxin, and released into the environment.

Paper production process uses Dioxin which is recognized as an environmental pollutant. Dioxins are highly toxic and cause reproductive, developmental, immunity and hormonal problems in human health. These are known as carcinogenic. Some companies have started using a new and significantly more environmentally friendly alternative to plastic packaging. It is biodegradable and recyclable with ordinary paper.

Paper mills usually consume a huge amount of water. The production of one ton of paper consumes 90 tons of water. To reduce water usage and protect nature, almost all paper mills have a proper effluent treatment plant (ETP) to reduce water consumption. Although few papermills are use modern machinery that consumes less energy, many papermill are still using old machineries which are not energy efficient.

The environmental problems of pulp and paper industry are not limited by the high-water consumption. Wastewater generation, solid wastes including sludge generating from wastewater treatment plants and air emissions are other problems and effective disposal and treatment approaches are essential. The significant solid wastes such as lime mud, lime slaker grits, green liquor dregs, boiler and furnace ash, scrubber sludges, wood processing residuals and wastewater treatment sludges are generated from different mills. Disposal of these solid wastes cause environmental problems because of high organic content, partitioning of chlorinated organics, pathogens, ash, and trace amount of heavy metal content.

Air pollutants and gas emissions are the other concern about the pulp and paper industry. The most important gas emission is water vapors. Additionally, particulates, nitrogen oxides, volatile organic compounds (VOCs), sulfur oxides and total reduced sulfur compounds (TRS).

Trees particularly suited for pulp production have been introduced in various regions worldwide. Some of those have now come to be recognized as aggressive invasive species. The *Acacia auriculaeformis* and *Acacia mangium* are such as invasive trees that is planted heavily. The fast-growing and highly profitable *eucalyptus* is also regarded an invasive species in various part of the world. These aggressive trees can do major damage to the ecosystem where they are introduced. They don't provide the same food, shelter, and other benefits that native species do. They often grow quickly, which can block sunlight for native species. They also absorb lots of water for which impacts native species of trees, small plants, and grasses.

The rise in global environmental issues such as air and water pollution, climate change, overflowing landfills and clearcutting have all lead to increased government regulations.

Recently fire incidents in paper mills have become rampant. There has been new of fire in at least one paper mills in every six months. This has been due to lack of safety concern by the owners. Investigations from these fire incidents has shown that there was not sufficient fire safety equipment or fire extinguishers were expired. There has been case of faulty electric wiring. Workers in the paper mills are not trained for fire incidents and no fire drills are done in these paper mills.

Many paper mills force its workers to work with toxic chemicals without safety equipment during production process. Therefore, these workers exposed to many health risks and suffer from various skin diseases. Many workers are also forced to work extra hours during peak seasons. There are cases of usage of child labor during these peak seasons.

Production with recycled paper and recycled products are expensive. Many paper producers advertise in their product that they have used recycled papers during production of paper-based products are produced from recycled papers. However, in reality, they do not used recycled materials and falsifies in their advertisements.

EXHIBIT – 8

News clips regarding paper industry in Bangladesh

Paper export doubles
12 January 2023 on The Daily Star

Bangladesh's export of paper and paper products have risen 123.35 per cent year-on-year in the first half of the current fiscal year thanks to the post-pandemic recovery and manufacturers' focus on finding new export destinations. However, manufacturers and exporters say the industry can do even better with more policy support. The US alongside countries in the Eurozone, Middle East and Africa are the major export destinations of locally produced paper and paper products, according to Bangladesh Paper Mills Association (BPMA).

As paper sales drop, industry shifts focus to tissue, diversified products
09 April 2022 on The Business Standards

Use of paper has declined for several years as digital media and people’s online dependence grows the paper industry in Bangladesh – like elsewhere in the world – is standing at a crossroads. According to entrepreneurs, the use of paper in public and private offices is declining due to the proliferation of digital media and people's growing online dependence. Academic activities' going online also has been contributing to a gradual decline in the demand for paper. While the consumption of newsprint and printing paper has been in steady decline because of digital disruption, the diversified products segments such as tissue and hygiene are doing well and achieving healthy growth. Especially, the Covid pandemic has given a real shot in the arm to the hygiene product segment of the paper industry.

Dollar crisis halts paper raw materials import, hits printing industry hard
20 November 2022 on The Business Standards

The paper mill owners are not being able to import raw materials due to the dollar crisis since the Russia-Ukraine war began, which has caused a severe crisis and rising prices of paper, a crucial item for industries including publication, newspaper, and education. As a result, the distribution of free textbooks among all primary and secondary students on the first day of the forthcoming year has become uncertain. On one hand, publishers are not able to publish sufficient books while buyers will have to pay three-times the price for education material including books and notes. The daily newspaper industry is also counting losses due to the soaring paper prices.

Paper Mill completely closed
15 Sep 2022 on The Business Standard

A 70-year-old paper mills in Bangladesh has recently closed its business. The mill was one of the oldest in the country. The mill was heavily debt burdened and was not able to turnaround its business. Its machineries were very old and not functioning properly. Mill couldn’t replace its machines with latest technology. Therefore, production was less, and cost of production was very high. Furthermore, price of the paper produced was very low compared to the market due to inferior quality. Closing of this mill has become an eye opener for other paper mills to regularly update their production facilities with latest technology.

Tk100cr fresh investment to ramp up wastepaper processing
19 March 2023 on The Business Standard

Paper industry leaders are now leaning towards boosting the recycling of wastepaper as the dearth of dollars continues to hinder the import of raw materials of pulp and paper. According to people concerned, at present only a few local paper mills have the required infrastructure to recycle wastepaper. But the amount of wastepaper recycled by these mills is inadequate compared to demand. The demand for recycled wastepaper as raw material is soaring.

Production of High Yield Pulp and Paper from Jute Fiber in Bangladesh
Research by Helena Akhter Sikder *et al*.

A comparative study, between eight crops residues which are acceptable to consider as pulping raw materials, shows that jute and other fibers are currently wasted after harvesting is good cellulosic source and contains low content of lignin. Therefore, jute fiber is good raw material for pulp and paper making industry. Its use will help to save forest and decrease environmental issues.

------------End------------