CENTRAL UNIVERSITY

END OF FIRST SEMESTER EXAMINATIONS 2021/2022



CENTRAL BUSINESS SCHOOL

DEPARTMENT OF BANKING AND FINANCE

CBBF 304: ACCOUNTING FOR BANKERS (3 CREDITS)

TIME ALLOWED: 3 HOURS

STUDENT ID NO:

INSTRUCTIONS: FOLLOW INSTRUCTIONS ON THE QUESTION PAPER

ANSWER FOUR (4) QUESTIONS IN ALL.
ATTEMPT QUESTION ONE (1) AND ANY OTHER TWO (2) QUESTIONS:

SECTION A: COMPULSORY [60 marks]

QUESTION ONE

a. Given the table below, suppose the firm uses the NPV decision rule. At a required return of 11 percent, should the firm accept this project? What about the Profitability Index and the Payback Period

Time		Net Cash Flows (GHC)
	0	(130,000)
	1	68,000
	2	71,000
	3	54,000

b. The table below shows the cash flows of A&C project over 5-year period with required rate of return of 12%.

Time	COSTS (GHc)	BENEFITS (GH c)
1	5,700	5,800
2	6,000	5,900
3	6,100	6,600
4	6,200	6,650
. 5	6,500	7,000

Calculate:

- (i) the Benefit-Cost Ratio (BCR)
- (ii) the Cost-Benefit Ratio (CBR)
- (iii) the Net Present Value (NPV)
- (iv) Given the NPV and BCR values, would you accept the project

[15 Marks]

c. Financial Analysis

Last year Cole Furnaces had \$5 million in operating income (EBIT). The company had a net depreciation expense of \$1 million and an interest expense of \$1 million; its corporate tax rate was 40%. The company has \$14 million in operating current assets and \$4 million in operating current liabilities; it has \$15 million in net plant and equipment. It estimates that it has an after-tax cost of capital of 10%. Assume that

Cole's only noncash item was depreciation.

- i. What was the company's net income for the year?
- ii. What was the company's net cash flow?
- iii. What was the company's net operating profit after taxes (NOPAT)?
- iv. Calculate net operating working capital and total net operating capital for the current year.
- v. If total net operating capital in the previous year was \$24 million, what was the company's free cash flow (FCF) for the year?

[15 Marks]

d. Financial Reporting

Attached is an extract of the financial statement of DCI Financial Company Limited. You have been contracted as a financial consultant to assist the company in evaluating and examining the strengths and weaknesses of the company through ratio analysis. Using the following ratios, assess the performance of the company over the 2-year period (2016-2017)

- i. Return on Asset
- ii. Current Ratio
- Loans to deposits ratio
- iv. Liquid assets to total assets
- v. Leverage ratio

[15 Marks]

SECTION B: CHOOSE ONLY TWO QUESTIONS FROM THIS SECTION [40 marks]

QUESTION TWO

The following are extracted balances from Harbhajan's business accounts along with other information relating to the business's year end on 30 April 2017. For some reason, the figure for Capital at the beginning of the year has not been supplied, although you have been given the year

end net profit figure:

Trade Payables 12,500 Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750		£
Sales Revenue 59,000 Motor Vehicles at cost 50,000 Purchases 25,000 Trade Receivables 13,500 Trade Payables 12,500 Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Capital as at 1 May 2016	Unknown
Sales Revenue 59,000 Motor Vehicles at cost 50,000 Purchases 25,000 Trade Receivables 13,500 Trade Payables 12,500 Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Machinery at cost	100,000
Purchases 25,000 Trade Receivables 13,500 Trade Payables 12,500 Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Sales Revenue	
Trade Receivables 13,500 Trade Payables 12,500 Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Motor Vehicles at cost	50,000
Trade Payables 12,500 Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Purchases	25,000
Accumulated [provision for] depreciation: Machinery 10,000 HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Trade Receivables	13,500
HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Trade Payables	12,500
HM Revenue and Customs: VAT (owing) 7.750 Net Profit as at 30 April 2017 7,105 Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Accumulated [provision for] depreciation: Machinery	10,000
Accumulated [provision for] depreciation: Motor Vehicles 5,000 Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	HM Revenue and Customs: VAT (owing)	7.750
Water and Utilities 4,500 Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Net Profit as at 30 April 2017	7,105
Inventory as at 1 May 2016 3,500 Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Accumulated [provision for] depreciation: Motor Vehicles	5,000
Wages and Salaries 3,500 Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Water and Utilities	4,500
Rent 3,000 Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Inventory as at 1 May 2016	3,500
Bank (in funds) 1,800 Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Wages and Salaries	3,500
Purchases Returns 1,355 Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Rent	3,000
Business Rates 1,250 Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Bank (in funds)	1,800
Bad Debts written off 1,150 Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Purchases Returns	1,355
Sales Returns 1,250 Discounts Allowed 950 Cash in Hand 760 Drawings 750	Business Rates	1,250
Discounts Allowed 950 Cash in Hand 760 Drawings 750	Bad Debts written off	1,150
Cash in Hand 760 Drawings 750	Sales Returns	1,250
Drawings 750	Discounts Allowed	950
	Cash in Hand	760
Discounts Received 550	Drawings	750
	Discounts Received	550

The Rent figure includes £600 relating to May, June and July 2017. The Machinery still has to be depreciated at year end by 10% straight line. There was unpaid Wages and Salaries at year end 30 April 2017 of £800. Stocktake at year end 30 April 2017 valued Inventory at £5,000. Motor Vehicles need year end depreciation (diminishing [reducing] balance at 10%).

Use the information given about Harbhajan's business as appropriate to prepare a Statement of Financial Position for its year end, including the missing figure for Capital.

[20 marks]

OUESTION THREE

Lady Gaga Plc is a renowned record manufacturing company and has received a one off order from Ginger Blears an English member of parliament to write and manufacture a song for her about how honourable she is. In addition to demonstrate her selfless efforts to public duty the record should be made from platinum, a more expensive material than the usual material used to manufacture records. Ms Blears is happy to pay for this record out of her expenses claiming it back from the taxpayer.

Currently Lady Gaga Plc's work force is at full capacity and would have to stop work on existing songs in development such as "If you don't know me by now" and "Everything I do, I do it for you" for other trustworthy members of parliament.

The following information is available for the usual manufacture of new songs.

	Per song (£)
Selling price	45,000
Material	(5,000)
Variable overheads	(3,000)
Labour	(2,000)
Contribution	35,000
Fixed overhead	(1,500)
Profit	33,500

What is the lost contribution suffered by Lady Gaga Plc if it accepted the order from Ginger Blears?

[20 marks]

QUESTION FOUR

Z plc is preparing a quotation for a one off contract to manufacture an item for a potential customer. The item is to be made of steel and the contract would require 300 kgs of steel. The steel is in regular use by Z plc and, as a consequence, the company maintains an inventory of this steel and currently has 200 kgs in inventory. The company operates a LIFO basis of inventory valuation and its most recent purchases were as follows:

- 20 November 2006 150 kgs costing £600
- 3 November 2006 250 kgs costing £1,100

The steel is easily available in the market where its current purchase price is £4.25 per kg. If the steel currently held in inventory was to be sold it could be sold for £3.50 per kg.

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Calculate the relevant cost of the steel to be included in the cost estimate.

QUESTION FIVE

[20 marks]

Discuss the relevance cost in decision making.

[Hint, make reference to the group presentation in class]

[20 marks]

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EXAMINER: DANIEL OFORI-SASU

Appendix

DCI FINANCIAL COMPNY LIMITED

STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31ST DECEMBER 2017

	2017	2016
	Ghs	Ghs
Interest and similar income	29,740,394	17,795,851
Interest and similar expense	(21,236,051)	(12,421,034)
Net interest income	8,504,343	5,374,817
Fees and commission income	3,476,970	2,699,541
Other operating income	(148,292)	79,805
Total operating income	11,833,021	8,154,163
Impairment loss	(2,246,222)	(590,975)
Net operating income	9,586,799	7,563,188
Personal expenses	(3,335,580)	(2,410,969)
Finance costs	(510,367)	(604,740)
General, selling and administrative expenses	(2,441,129)	(2,201,765)
Total operating expenses	(6,287,076)	(5,217,474)
Profit before Tax	3,299,723	2,345,714
Income Tax	(843,118)	(727,046)
Profit after Tax	2,456,605	1,618,668
Other comprehensive income	-	-
TOTAL COMPREHENSIVE INCOME FOR THE	N. 21 - 100 100 101 101 101	-
YEAR	2,456,605	1,618,668

Appendix

DCI FINANCIAL COMPNY LIMITED STATEMENT OF FINANCIAL POSITION AS OF 31ST DECEMBER 2017

STATEMENT OF FINANCIAL POSITIO	2017	2016
Assets	Ghs	Ghs
Current assets		
Cash and cash equivalents	10,098,698	2,337,761
Investments	43,308,994	20,031,599
Loans and advances	53,680,782	33,910,543
Other assets	12,880,640	8,331,702
Total current assets	119,969,114	64,611,605
Non-current assets		
Property plant and equipment	2,028,996	1,555,233
Intangible assets	94,349	47,559
Deferred tax assets	145,557	147,744
Total non-current assets	2,268,902	1,750,536
Total Assets	122,238,016	66,362,141
EQUITY		
Stated capital	15,000,000	1,200,000
Shareholders contribution	395,951	10,900,000
Regulatory risk reserve	3,274,384	2,629,199
Statutory reserve fund	2,634,326	1,406,024
Retained earnings	734,360	313,109
Total equity	22,039,021	16,448,332
Current liabilities		
Customer deposits	84,739,889	45,272,731
Interest payable and other liabilities	4,674,000	3,010,830
Interest payable on long-term debts	138,083	
Taxation	647,023	493,964
Bank overdraft	-	1,027,393
Total current liabilities	90,198,995	49,804,918
Non-current liabilities		
Long-term debts	10,000,000	
Deferred tax liabilities	-	108,891
Total non-current liabilities	10,000,000	108,891
TOTAL LIABILITIES AND EQUITY	122,238,016	66,362,141