



“Investing in Africa’s future”

COLLEGE OF BUSINESS PEACE LEADERSHIP GOVERNANCE (CBPLG)

MAC204: BUSINESS FINANCE

END OF SECOND SEMESTER FINAL EXAMINATIONS

NOVEMBER 2019

LECTURER: MR. GABRIEL MUZAH

DURATION: 3 HRS

INSTRUCTIONS

The Paper contains four (4) Questions

Answer **all four (4) questions**

All questions total ninety (90) marks.

DO NOT repeat material.

Write legibly. Write your answer clearly. Use numbered headings or subheadings to show which part of your answer refers to which question. Example: Question 2 (a)

Question 1

This semester you were requested to choose any listed firm of your choice. With reference to this particular firm:

- a) Who are the top shareholders of your firm? **[7 Marks]**
- b) What are the potential conflicts of interest that you see emerging from this shareholding structure? **[10 Marks]**
- c) Discuss any external measures of the quality of corporate governance of your firm? **[8 Marks]**
- d) Discuss any tangible evidence that your board acts independently of management? **[7 Marks]**

[Total 32 Marks]

Question 2

- a) Your company borrows \$400 000 at an interest rate of 15.90748%. As a Finance Manager you plan to make quarterly payments of \$40 000. Draw up a loan amortisation or an account schedule to service this debt?

[Total 12 Marks]

Question 3

- a) You have just taken a 30-year mortgage loan for \$200,000. The annual percentage rate on the loan is 8%, and payments will be made monthly. Estimate your monthly payments. **(7 marks)**
- b) Suppose you want to accumulate \$450,000 over the next 6 years in order to buy a new building for your business. You plan to make monthly payments into an ordinary annuity that earns 4.5%. Calculate the regular payment. **(4 Marks) [Total 11 Marks]**

Question 4

The expected cash flows of three projects are given below. The cost of capital is 10 per cent.

Period	Project A \$	Project B \$	Project C \$
0	(5000)	(5000)	(5000)
1	900	700	2000
2	900	800	2000
3	900	900	2000
4	900	1000	1000
5	900	1100	
6	900	1200	
7	900	1300	
8	900	1400	
9	900	1500	
10	900	1600	

- a) Calculate the payback period, net present value (NPV), internal rate of return (IRR) and return on capital employed (ROCE) of each project. **[30 Marks]**
- (b) Show the rankings of the projects by each of the four methods and comment on your findings. **[5 Marks]**

[Total 35 Marks]

END OF EXAM

LIST OF FORMULAE

$$FV_n = PV_0(1+i)^n$$

$$PV_0 = FV_n \times \frac{1}{(1+i)^n}$$

$$i = \left[\frac{FV_n}{PV} \right]^{\frac{1}{n}} - 1$$

$$FVAN_n = PMT \left[\frac{(1+i)^n - 1}{i} \right]$$

$$PVAN_n = PMT \left[\frac{1 - \frac{1}{(1+i)^n}}{i} \right]$$

$$NPV = -I_0 + \frac{C_1}{(1+r)} + \frac{C_2}{(1+r)^2} + \frac{C_3}{(1+r)^3} + \dots + \frac{C_n}{(1+r)^n}$$

$$IRR (\%) = A + [(B-A) * (a / (a+b))]$$

$$A.R.R. = ROCE = \frac{\text{Average profits}}{\text{Average Investment}}$$