KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

DIGITAL SCHOOL OF VIRTUAL AND OPEN LEARNING

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

BAC 204: BUSINESS FINANCE II

DATE: WEDNESDAY 20TH JUNE 2018 **TIME: 4.30 P.M. – 6.30 P.M.**

INSTRUCTIONS

i) Answer ALL the questions

ii) Show ALL the necessary workings

iii) Your work should be neat and tidy

Question One

a) An embroidery machine was purchased 10 years ago at a cost of sh. 390,000. The machine had an expected life of 15 years at the time it was purchased and management originally estimated and still believes that the salvage will be zero at the end of the 15 year life. The machine is being depreciated on a straight line basis. Its present book value is sh. 130,000.

The manager reports that a special purpose machine can be purchased for sh. 624,000 (including freight and installation) and over its five year life it will reduce labour and raw material usage sufficiently to cut annual operating cost from sh. 364,000 to sh. 208,000. Annual increase in profit before tax is expected to be sh. 140,000.
It is estimated that the new machine can be sold for sh. 104,000 at the end of five years. The old machine's actual current value is shs. 52,000 which is below its sh. 130,000 book value. Net working capital will increase by sh. 52,000 at the time of replacement. The company is in 30% tax bracket and the project cost of capital is 21% p.a.

Required: Compute

i)	The incremental cash outlay	(5 marks)
ii)	Operating inflows over the project's life	(4 marks)
iii)	Terminal year cash flow	(3 marks)
iv)	Net cash flow	(2 marks)
v)	Should the machine be replaced?	(2 marks)

b) Explain four features of an ideal investment appraisal method (4 marks

Question Two

a) Explain the following theories of dividend policy

i)	Bird-in-hand Theory	(4 marks)
ii)	Dividend Irrelevances Theory	(4 marks)
iii)	Tax preference Theory	(4 marks)

b) Trump Ltd is considering various levels of debt. Currently it has no debt. It has a total market value of sh. 156 million. By undertaking debt, it is expected that it can achieve a net tax advantage equal to 20% of the amount of debt. However the company will incur bankruptcy and agency costs as well as lenders increasing their interest rate it borrows too much. The company's managing director believes that the company can borrow up to sh. 52 million without incurring any of these costs. However, each additional sh. 52 million increment in borrowing is expected to result in the three costs cited being incurred. Moreover, the three costs are expected to increase at an increasing rate with leverage. The present value cost of various levels of debt is as follows:

Debt in millions of shillings	PV cost of bankruptcy, agency and increased interest rate (sh' m)
52	0
104	3.12
156	12.48
208	20.8
260	33.28
312	52

Required

Advise the managing director on the optimal amount of debt for Trump Ltd.(10 marks)

(Total 22 marks)

Question Three (10 marks)

Keroka Ltd makes annual sales of 624,000 units at sh. 52 per unit. The unit variable cost is sh. 31.20 the company is considering changing the credit policy expected to result a 15 percent increase in sales. The increase in bad and doubtful debts expense is expected to increase from 2% to 3% of the sales. Other working capital items apart from accounts receivable are expected to be 20% of sales. The current credit terms are net 30 and the proposed terms are 2/10 net 30. The company expects 20% of the customers to take advantage of the cash discount. The opportunity cost of capital is 12%. Assume a 360 day year.

Required

Advice the company on whether or not it should change the credit policy. (Show the workings)

(10 marks)

Question Four

A company is considering two mutually exclusive projects requiring an initial cash outlay of sh. 52,000 each and with a useful life of 5 years. The company required rate of return is 10% and the appropriate corporate tax rate is 50%. The projects will be depreciated on a straight line basis. The before depreciation and taxes cash flows expected to be generated by the projects are as follows:

Year	1	2	3	4	5
	Sh.	Sh.	Sh.	Sh.	Sh.
Project A	20,800	20,800	20,800	20,800	20,800
Project B	31,200	15,600	10,400	26,000	26,000

Required:

Calculate for each project

i) The payback period (3 marks)

ii) The average rate of return (3 marks)

iii) The net present value (4 marks)

iv) Profitability index (2 marks)

v) The internal rate of return (4 marks)

vi) Which project should be accepted? Why? (2 marks)