KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2016/2017

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF COMMERCE

BAC 204: BUSINESS FINANCE II

DATE: TUESDAY 29TH NOVEMBER 2016 TIME: 8.00 A.M. - 10.00 A.M.

INSTRUCTIONS

Answer ALL Questions

Question one

a. Sagala the investment manager of M Ltd. is contemplating the necessary replacement of an item of manufacturing plant. A recent investigation of plant available revealed two suitable models: Alpha and Beta whose information is provided below:

Item	Alpha	Beta
Estimated cost ($)	75,000	140,000
Estimated salvage value ($)	20,000	30,000
Estimated annual cash savings before tax ($)	45,000	65,000
Depreciation ($)	15,000 p.a.	20,000 p.a
Estimated life (years)	5	7

The existing plant although depreciated to a book value of zero has an estimated current net scrap value of $25,000. Given a tax rate of 30% and an estimated after tax required rate of return of 12% per annum.

Required:

Which model should Sagala accept? **[12marks]**

b. You are part of a team that is evaluating a new recreational activity in your area. You have been given the following data;

- Your company has spent shs5 million gathering information and market data.
- Initial start-up costs are expected to be shs.9,000,000
- Your activity is expected to generate new jobs in the area (a priority for the government). Accordingly they will provide you with a 20% investment allowance on your initial start-up costs.
- Revenues are expected at shs.8million p.a
- Annual ongoing operating expenses are expected at 30% of revenue.
- Depreciation will be 25%p.a on cost.
- Your team expects the activity to be obsolete in three years time. At that point in time the expected salvage value will be shs.2 million.
- The company currently pays company tax at a rate of 20%.
- The company has a required payback period of 3 years on all such investments and a required rate of return of 15%.

i. Using NPV and payback criteria should your company enter into the activity? Show all workings.

ii. Explain why you did not use certain expenses in your calculations **[13marks]**

c. Olsen Engineering is considering including two pieces of equipment- a truck and a pulley system in this year's capital budget. The cash outlay for the truck is $22,430, and the pulley system is $17,100. Each piece of equipment has an estimated life of five years. The annual after tax cash flow for the truck is $7,500 and for the pulley is$5,101. The firms required rate of return is 14%. The projects are independent.

Required:

i. Calculate the **NPV, IRR, MIRR** for each project, assuming a required rate of return of 14%. **[9marks]**

ii. Which project(s) should be selected? **[1marks]**

[Total 35marks]

Question two

a. Distinguish between the traditional and the MM theories of capital structure **[5marks]**

b. Two firms, Alpha and Omega operate in the same industry. The two firms are similar in all aspects except for their capital structures. The following information has also been provided:

1. Alpha is financed using shs.200million worth of ordinary shares.
2. Omega is financed using shs.100million in ordinary shares and shs.100million in 7% debentures.
3. The annual earnings before interest and tax are shs20million for both firms. These earnings are expected to remain constant indefinitely.
4. The cost of equity for Alpha is 10%.
5. The corporate tax rate is 30%

Required:

i. The market value of Alpha and Omega **[4marks]**

ii. The weighted average cost of capital Alpha and Omega. **[4marks]**

[Total 13marks]

Question three

a. Mkopo credit company employs agents who collect hire purchase instalments and other outstanding accounts on a door to door basis from Monday to Friday. The agents bank the cash collected to be remitted to head office once per week at the end of the week. The budget for the next year shows that the total collections will be shs.800million and that the estimated bank overdraft rate is 15%. The collection manager has suggested that a daily remitting system should be introduced for collectors. Assume that takings are evenly spread daily and weekly. Should the collection system be implemented? [6 marks]

b. Reds sells Product P with sales occurring evenly throughout the year. The annual demand for Product P is 300,000 units and an order for new inventory is placed each month. Each order costs shs.267 to place. The cost of holding Product P in inventory is 10 cents per unit per year. Buffer inventory equal to 40% of one month's sales is maintained.

Required:

(i) The total cost of the current ordering policy; [3 marks]

(ii) The total cost of an ordering policy using the economic order quantity [3 marks]

c.

[Total 12marks]

Question four

Briefly explain the following theories of dividend policy

i. Bird in hand theory **[4marks]**

ii. MM dividend Irrelevance theory **[3marks]**

iii. Tax preference theory **[3marks]**

[Total 10marks]