MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

SECOND YEAR FIRST SEMESTER EXAMINATION FOR

MASTER OF BUSINESS ADMINISTRATION

BAC 823: CORPORATE FINANCE

DATE: 5/3/2021 **TIME: 9.00-12.00 PM**

INSTRUCTIONS:

1. Answer QUESTION ONE and any other THREE questions
2. All workings where necessary must be shown
3. Be clear, neat and orderly in your presentation

QUESTION ONE (25 MARKS)

a) Explain five (5) factors that affect the working capital needs of a company. (5 marks)

b) Triumph ltd buys raw materials from suppliers that allow Triumph ltd 3.5 months' credit. The raw materials remain in inventory for two months and it takes Triumph ltd 2 months to produce the goods. The goods are sold as soon as production is completed and customers take on average 2.5 months to pay. Determine Triumph Ltd.'s cash operating cycle. (5 marks)

c) Ms Wanja was recently appointed to the post of finance manager of New Life Ltd. a quoted company. The company has raised Sh.8, 000,000 through a rights issue to use in financing either of the two projects X and Y which are mutually exclusive.

Project X has 7 years and Project Y has 4 years of economic life. Both projects are expected to have zero salvage value. Their expected cash flows are as follows:

Project	X	Y
Year	Cash flows (Sh.)	Cash flows (Sh.)
1	2,000,000	4,000,000
2	2,200,000	3,000,000
3	2,080,000	4,800,000
4	2,240,000	800,000
5	2,760,000	-
6	3,200,000	-
7	3,600,000	-

The amount raised would be used to finance either of the projects. The company expects to pay a dividend New Life Ltd per share of Sh.6.50 in one year's time. The current market price per share is Sh.50. New Life Ltd expects the future earnings to grow by 7% per annum due to the undertaking of either of the projects. New Life Ltd. has no debt capital in its capital structure.

Required:

i. The net present value of each project. (5 marks)

ii. The Internal Rate of return (IRR) of the projects. (Rediscount cash flows at 24% for project X and 25% for Project Y). (6 marks)

iii. Briefly comment on your results in (b) and (c) above. (4 marks)

QUESTION TWO (15 MARKS)

a) Firm L has employed a 6 percent debt of $300,000, while firm U is unlevered. Both the firms earn a before tax earnings of $120,000. The pure equity capitalization rate is 10 percent and the corporate tax rate is 34 percent. Find the market value of the firms. Demonstrate that use of debt maximizes the value of the firm. (6 marks)

b) Critically examine the pecking order theory of capital structure. (4 marks)

c) With the aid of a diagram, illustrate the relationship between time to maturity and value of a corporate bond. (5 marks)

QUESTION THREE (15 MARKS)

The management of Viwanda Ltd. is in the process of evaluating the company's dividend policy. The following information is provided:

1. The company paid Sh.1.2 million as dividends in the last financial year.
2. The profit after tax for the last financial year was Sh.3.6 million.
3. The company has not issued any preference shares
4. The earnings growth rate has been consistent at 10% per annum for the past ten years.
5. The expected profit after tax for the current financial year is Sh.4.8 million
6. The company anticipates investment opportunities worth Sh.1.4 million in the current financial year.
7. The capital structure of the company consists of sixty per cent equity and forty per cent debt.

Required:

Determine the optimal total dividends for the current financial year if the company wishes to adopt each of the following independent dividend policies

a) Pure residual policy (3 marks)

b) Constant payout ratio policy (3 marks)

c) Stable predictable dividend policy, the growth rate being equivalent to the earnings growth rate. (4 marks)

d) Regular plus extra dividend policy. The regular dividends would be based on the long run growth rate of earnings while the extra dividends would be based on the residual income. (5 marks)

QUESTION FOUR (15 MARKS)

a) Critically examine why companies do not use only debt in their capital structure yet use of debt has been proved to maximize the value of a firm. (5 marks)

b) Does the dividend decision affect the value of a firm? Critically examine the key issues surrounding how corporate executives decide between retention and distribution. (10 marks)

QUESTION FIVE (15 MARKS)

a) Paramount Products Ltd. wants to raise KES 10 million for diversification project. Current estimates of EBIT from the new project is KES 2.2 million p.a. Cost of debt will be 15% for amounts up to and including KES 4 million, 16% for additional amounts up to and including KES 5 million and 18% for additional amounts above KES 5 million. The equity shares (face value of KES. 10) of the company have a current market value of KES 40. This is expected to fall to KES. 32 if debts exceeding KES 5 million are raised. The following options are under consideration of the company.

Option	Debt	Equity
I	50%	50%
II	40%	60%
III	60%	40%

Determine EPS for each option and state which option should the Company adopt. Tax rate is 50%. (8 marks)

b) The following information relates to Jubilee Limited. Calculate the length of the operating cash cycle. (7 marks)

	Sh.000
Purchase of raw material	6,700
Usage of raw material	6,500
Sale of finished goods (all on credit)	25,000
Cost of sales(Finished goods)	18,000
Average creditors	1,400
Average raw materials stock	1,200
Average work in progress	1,000
Average finished goods stock	2,100
Average debtors	4,700

Assume a 365 days year.