

# FOURTH YEAR EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR <br> OF AGRIBUSINESS MANAGEMENT 

## AGBM 413: FINANCIAL MANAGEMENT

STREAMS: B. AGBM Y4S1
TIME: 2 HOURS
DAY/DATE: THURSDAY 7/12/2017
11.30 A.M - 1.30 P.M.

## INSTRUCTIONS:

- Question ONE is and any other TWO Questions I
- Do not write on the question paper
- Present Tables are attached at work of the back of the question paper


## QUESTION ONE

Explain the following sources of funds that can be used by agricultural business.
(i) Trade Credit
[2 Marks]
(ii) Leasing
[2 Marks]
(iii)Bank overdraft
(b) ABC Ltd is considering investing in a new cooling system with the following characteristics:

- Initial investment of Kshs. 7.63 million with no scrap value
- Expected Economic life of 5 years
- Sales volume of 1.12 million Litres per annum
- Selling price of Ksh. 15 per Litre
- Variable cost of Kshs. 11 per Litre
- Fixed cost excluding depreciation of Kshs.1.628 million per annum

The Company's hurdle rate is $15 \%$ and it uses straight line method of depreciation.
The corporate tax rate is $40 \%$.

## Required:

(i) Calculate the NPV of the project.
(ii) Perform the sensitivity analysis (Breakeven analysis) of the project assuming that characteristics (iii) and (i) above varies adversely by $10 \%$ at different times.
[10 Marks]

## AGBM 413

(c) Differentiate between the following;
(i) Degree of financial leverage and degree of operating leverage.
[2 Marks]
(ii) Constant amount of dividend policy and constant payout ratio policy.
(iii)Allocative efficiency and operational efficiency.

## QUESTION TWO

(a) The earnings yield of Excel Ltd is $20 \%$ and the current market price per ordinary share is Kshs.100. Each share has a par value of Ksh.50. The dividend for the current year is expressed as $10 \%$ of the par value of a share.

## Required: Calculate;

(i) Earnings per share
(ii) Dividend Cover
[2 Marks]
(iii)Dividend Yield
[2 Marks]
(iv)Prices Earnings Ratio
[2 Marks]
(b) Explain the limitations of financial ratio as a tool for financial statement analysis.
[4 Marks]
(c) XYZ Ltd has an average selling price of Kshs. 10 per unit, variable cost of Kshs. 7 per unit and total fixed cost of Khs. 170,000 . It finances all its assets by equity funds. It pay $35 \%$ tax on its income. ABC Ltd is identified to XYZ Ltd except in the pattern of financing. The later finances its assets by $50 \%$ debt, the interest on which amounts to Kshs.20,000. The sales are Kshs.700,000 for each firm.

## Required:

(i) Determine the operating leverage for each firm and interpret the results.
[3 Marks]
(ii) Degree of financial leverage for each firm and interpret the results.
[3 Marks]
(iii)Degree if combined leverage.

## QUESTION THREE

(a) Explain the following dividend theories;
(i) Modigilian and Miller dividend Theory.
[3 Marks]
(ii) Signaling Theory
(iii)Clientele effect theory
(b) ABC Ltd belongs to a risk class for which the appropriate capitalization rate is $10 \%$. It currently has outstanding 5000 shares selling at Kshs. 100 each. The firm is contemplating declaration of a dividend of Khs. 6 per share at the end of the current financial year. The company expects to have a net income of Kshs.50,000 and has a proposal of making a new investment of Kshs.100,000

## Required:

Show under MM hypothesis that payment of dividend does not affect the value of the firm.

## AGBM 413

[5 Marks]
(c) Explain why two different companies with the same capital base and same profit after tax would pay different amount of dividend per share.
[4 Marks]
(d) What is the difference between Beta of a security and standard deviation of a security's return.
[2 Marks]

## QUESTION FOUR

(a) Mr. Kamau is considering investing in a project which costs Kshs.40,000. The expected returns during the life of the project are as follows:

| Year I |  |  |
| :--- | :--- | :--- |
| Event | Cash inflow | Probability |
| i | Kshs.16000 | 0.3 |
| ii | Kshs.24000 | 0.5 |
| iii | Kshs.20000 | 0.2 |


| Year 2 |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Year 1 Cash Inflows (Kshs.) | $\mathbf{1 6 , 0 0 0}$ |  | $\mathbf{2 4 , 0 0 0}$ <br> 20,000 |  |  |  |
| Year 2 Cash Inflows (Kshs.) | Cash Inflows | Prob | Cash Inflows | Prob | Cash Inflows | Prob |
| i | 30,000 | 0.2 | 40000 | 0.1 | 5000 | 0.2 |
| ii | 40,000 | 0.6 | 60000 | 0.8 | 8000 | 0.5 |
| iii | 50,000 | 0.2 | 80000 | 0.1 | 12000 | 0.3 |

Assuming the cost of capital is $10 \%$, advice about the acceptability of the investment proposal. What is the probability of getting a negative NPV?
[11 Marks]
(b) Explain the following forms of market efficiency
(i) Weak-form
[3 Marks]
(ii) Strong-form [3 Marks]
(iii)Semi strong form

