# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY SCHOOL OF BUSINESS AND ECONOMICS <br> UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN CONSTRUCTION MANAGEMENT <br> $4^{\text {TH }}$ YEAR $2^{\text {ND }}$ SEMESTER 2019/2020 ACADEMIC YEAR 

COURSE CODE: BBM 3422

COURSE TITLE: Financial Management
EXAM VENUE:
STREAM: (BBA-FINANCE)
DATE:
EXAM SESSION:
TIME: 2 HOURS

## Instructions:

1. Answer ALL questions in section $A$ and ANY other 2 questions in section $B$
2. Candidates are advised not to write on the question paper.
3. Candidates must hand in their answer booklets to the invigilator while in the examination room

## QUESTION ONE

a) Does the firm's profit maximization strategy have to be the same with wealth maximization programme? Explain.
(10 Marks)
b) Explain the relationship between an investors required rate of return and the cost of capital.
(5 Marks)
c) A zero coupon bond with a ten-year maturity and a face value of Kshs. 10,000/- is issued by Otonglo Enterprises for subscription. Calculate the bond market value if the market return $s$ for similar bonds is $12 \%$.
(5 Marks)
d) ABC Company dividends are expected to grow perpetually at $6 \%$ and the dividend per share is also expected to be $8 /=$ at the end of the first period. The appropriate discount rate with this type of security is at $14 \%$. Calculate the share price.
(5 Marks)
e) The following are important milestones in the understanding of finance theory. Discuss.
i. Security Market Line (SML)
ii. Capital Asset Pricing Model (CAPM)
iii. Efficient Market Hypothesis (EMH) (5 Marks)

## QUESTION TWO

a) Define risk and return relationship. How can this be redefined through portfolio diversification?
b) What are the basic components of risk? How do they affect an investor's business decision?
(5 Marks)
c) Suppose XYZ Company has invested in the following stocks (securities):

|  |  | Amount Invested (Kshs.) | Expected Return | Beta |
| :--- | :--- | ---: | :--- | :--- |
| Security | A | 50,000 | $8 \%$ | .80 |
|  | B | 100,000 | $12 \%$ | .95 |
|  | C | 300,000 | $15 \%$ | 1.10 |
|  | D | 500,000 | $18 \%$ | .40 |

Required:
i. Calculate the expected return of this portfolio.
ii. Does this portfolio have more or less systematic risk than an average asset? Explain.
(5 Marks)

## QUESTION THREE

a) "The importance of capital budgeting cannot be over emphasized." Do you agree? Why?
(5 Marks)
b) What are the steps involved in capital budgeting process.
c) A project costs Kshs. 162,000/= and is expected to generate cash flows of Kshs. 80,000/=, Kshs. 70,000/= and Kshs. 60,000/= over its life of 3 years. Calculate the projects internal rate of return.
d) Explain capital-rationing rationalization.

## QUESTION FOUR

a) Distinguish between time series and cross sectional analysis of financial statements. Explain their unique applications to the understanding of company performance.
b) The total sales (all credit) of a firm are Kshs. 640,000. It has a gross profit margin of $15 \%$ and current ratio of 2.5 . The firm's current liabilities are Kshs. 96,000 , inventories Kshs. 48,000 and cash Kshs. 16,000.
Required:
i. Determine the average inventory to be carried by the firm with an inventory turnover of 5 times based on 360 day year.
(5 Marks)
ii. Determine the average collection period if the opening balance of debtors is to be Kshs. 80,000/- based on 360 day year.

## QUESTION FIVE

a) What is the CAPM approach for calculating the cost of equity? What is the difference between this approach and the constant growth approach? Which one is better? Why?
(5 Marks)
b) The Ndugu Company has the following capital structure as of 30/06/2004:

|  | KSHS |
| :--- | ---: |
| Ordinary Shares (200000 Shares) | $4,000,000$ |
| $10 \%$ Preference Shares | $1,000,000$ |
| $14 \%$ Debentures | $3,000,000$ |
|  | $\mathbf{8 , 0 0 0 , 0 0 0}$ |

The share of the company sells at 20/-. It is expected that the company will pay next year dividend of Kshs. 2/= per share, which will grow at $7 \%$ forever. Assume a $50 \%$ tax rate.

Required:
i. Compute the WACC based on the existing capital structure.
(5 Marks)
ii. Compute the new WACC if the company raises an additional Kshs. 2,000,000/- debt by issuing $15 \%$ debenture. This will lead to increasing dividends to Kshs. 3/= and leave the growth rate unchanged, but the share price will fall to Kshs. 15/= per share.
iii. Compute the cost of capital if in (ii) above growth rate increases to 10\%. (5 Marks)

