TECHNICAL UNIVERSITY OF MOMBASA

## School of Business

UNIVERSITY EXAMINATION FOR:<br>BACHELOR OF COMMERCE<br>BFI 4300-FINANCIAL MANAGEMENT<br>END OF SEMESTER EXAMINATION<br>SERIES:DECEMBER 2016<br>TIME:2HOURS

## Instructions to Candidates

You should have the following for this examination

- Answer Booklet, examination pass and student ID

This paper consists of FIVE questions. Attempt Question ONE (Compulsory) and any other Two questions
Do not write on the question paper.

## QUESTION 1

Two neighbouring countries have chosen to organize their electricity supply industries in different ways. In country A , electricity supplies are provided by a nationalised industry. On the other hand in country B electricity supplies are provided by a number of private sector companies.

## Required:

(a) Explain how the objectives of the nationalised industry in country A might differ from those of the private sector companies in country B.
(10 marks)
(b) Briefly discuss whether investment planning and appraisal techniques are likely to differ in the nationalised industry and private sector companies.
(10 marks)
(c) Normal usage: 100 units per week

Maximum usage: 150 units per week
Minimum usage: 50 units per week
Re-order quantity (EOQ) 500: units
Log in time: 5 to 7 weeks
From the above information following information calculate:
(1) Re-order level
(2) Maximum level
(3) Minimum level

## QUESTION 2-

A company is considering two mutually exclusive projects requiring an initial cash outlay of $\operatorname{Sh} 10,000$ 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 cashflows expected to be generated by the projects are as follows.

| $\boldsymbol{Y E A R}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :---: | :--- | :--- | :--- | :--- |
| Project A | Shs 4,000 | 4,000 | 4,000 | 4,000 | 4,000 |
| Project B | Shs 6,000 | 3,000 | 2,000 | 5,000 | 5,000 |

## Required:

Calculate for each project
i. The payback period (4 marks)
ii. The average rate of return (4 marks)
iii. The net present value (4 marks)
iv. Profitability index
(4 marks)
v. The internal rate of return
(4 marks)

## QUESTION 3

(a)Outline how a major refurbishment of publicly funded hospital facilities might affect the Public Sector Borrowing Requirement.
(10 marks)
(b) Compute the market value of the firm, value of shares and the average cost of capital from the following information.

Net operating income Kshs. 1,00,000
Total investment Ksh. 5,00,000
Equity capitalization Rate:
(a) If the firm uses no debt $10 \%$
(b) If the firm uses Rs. 25,000 debentures $11 \%$
(c) If the firm uses Rs. 4,00,000 debentures $13 \%$

Assume that Ksh. 5,00,000 debentures can be raised at $6 \%$ rate of interest whereas Ksh. 4,00,000 debentures can be raised at $7 \%$ rate of interest.

## QUESTION 4

(a) X Company Ltd., has 100000 shares outstanding the current market price of the shares Ksh. 15 each. The company expects the net profit of Rs. 2,00,000 during the year and it
belongs to a rich class for which the appropriate capitalisation rate has been estimated to be $20 \%$. The company is considering dividend of Rs. 2.50 per share for the current year.

What will be the price of the share at the end of the year (i) if the dividend is paid and
(ii) if the dividend is not paid.
(b) The problem with selling off profitable publicly owned undertakings is that in the long term government, and therefore the taxpayer, loses out by forfeiting the future stream of profits.

## Required:

Discuss briefly the validity of the above statement.

## QUESTION 5

(a)Diani company has sales of rs. $25,00,000$. variable cost of rs. 12,50,000 and fixed cost of Ksh. 50,000 and debt of Ksh. 12,50,000 at $8 \%$ rate of interest. Calculate combined leverage. ( 10 marks)
(b) Critically examine the advantages and disadvantages of equity shares.

