

# JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

## AEC 402: Public Finance and Fiscal Policy

### Final Examination

#### Main Campus

Duration: 2 Hours

#### QUESTION ONE (COMPULSORY)

- a) Explain four major risks associated with investments in bonds. ( 10marks)
- b) Mr Kamau is a long term investor through Nairobi Securities Exchange Market. He is considering the purchase of a 10 year 12% Ksh. 110 par value preference share .The redemption value of the preference share on maturity is Kshs.125.The investors required rate of return is 9.5% advice on the share price now for him. (5marks)
- c) Governments across the world have experienced problems in recent years as their debt levels have gone up leading to what has been called a “global debt crisis”. There have been instances where many social and financial commentators have questioned, for example the sustainability of Kenya’s debt levels and the recent Eurobond that raised over Kshs.172B. Explain five measures the government has to take to ensure efficiency in the utilization of the borrowed funds. (15marks)

#### QUESTION TWO

- a) Briefly explain liquidity premium theory. (5marks)
- b) A Government Corporation trading at Nairobi Securities Exchange Market is considering floating a 5 year 11.5% rate bond of Kshs 1000m face value with a current market value of Kshs.1,044.5m and YTM of 10.6%. the purpose is to finance is to expand on its infrastructure across the country.
- i) Determine the bond duration hence its volatility assuming that the interest is earned at the end of every year. (10marks)
- ii) Outline **five** advantages of investing in such a bond. (5marks)

#### Question Three

The CFO of Jacaranda Holdings has now tasked you to evaluate two projects which the company would like to invest in. The cash flows of these two projects have the same risk as the company’s general business of 5%. The investors required rate of return is 10% pa. Because the projects are classified, they have been named project Y and Z. The following cash flows apply to these two projects:

	<b>Project Y (Kshs) ('000)</b>	<b>Project Z(Kshs) Mils('000)</b>
<b>Initial Costs</b>	10,000	10,000
<b>Cash flows</b>		
Year 1	4800	5500
Year 2	4400	3500
Year 3	3000	4000
Year 4	6000	5500

Required

- Calculate each project's risk adjusted NPV, and PI, **(10 marks)**
- Which project(s) should be accepted if they are; (i) independent or (ii) mutually exclusive? **(4 marks)**
- Explain three features of an effective project evaluation technique **(6marks)**

**(Total marks 20)**

#### Question four

Elimu Holdings deals in the supply of educational materials to schools in Kenya and is located in Thika. It has been having problems with managing its working capital.

The following financial statements relates are provided:

#### Statement of financial position the year ended 31/03/ 2011

ASSETS	KSHS	LIABILITIES OF NETWORTH	KSHS
Cash	28,500	Trade creditors	116,250
Debtors	270,000	Notes: payable (9%)	54,000
Stock	649,500	Other current liabilities	100,500
Total Current Assets	948,000	Long-term debt ( 10% )	300,000
Net fixed Assets	285,750	Net worth capital	663,000
	1,233,750		1,233,750

#### Income statement for the year ended 31/03/ 2011(ksh)

Sales	1,972,500.00
Less: Cost of sales	1,368,000.00
Gross Profit	604,500.00
Selling & Administration express	498,750.00
EBIT( Earning before interest & Taxes)	105,750.00

Interest Expen9% of54, 000} surcharged or 10% of 300,000 Discharged.	34,500.00 71,250.00
Estimate Taxation ( 40% of 71 250.00)	28,500.00
Earning after interest and taxes	42,750.00

**Required:**

- a). Calculate inventory turnover ratio.
- b).Times interest earned ratio.
- C). Total assets turnover.
- d). Net profit margin.

Elimu holdings operates in on industry whose norms are as follows:

- 2 Inventory turnover ratio 6.2 times.
- 3 Times interest earned ratio 5.3 times.
- 4 Total assets turn over 2.2 times.
- 5 Net profit margin 3%.

Comment on the revelations made by the ratios you have computed in parts a-d above when compared with industry averages.

**QUESTION FIVE**

- a) Explain four factors affecting cost of capital (8marks)
- b) Ltd has heard a good trading period & would like to extend their business to make use of favourable conditions. They have planned to;

Issue 50, 000 ordinary shares of (ksh. 10 nominal value) ksh. 15 each.

Issue 200 000 13% preference shares (Kshs. 10 nominal value) at 12/= each.

Issue 200, 000 5% debentures of 100/= at ksh. 90 each.

Finally they plan to raise a medium term loan of 5 million from Non-banking institution which will be at interest of 20% per annum assume corporation rate is 30%. Ordinary shareholders are paid a dividend of 10%

**Required**

- a) Calculate total amount that the company will raise if the plan is realized.(5marks)
  
- b) The WACC of additional finance. (15marks)

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