

W1-2-60-1-6

**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

**THIRD YEAR SUPPLEMENTARY/SPECIAL EXAMINATION FOR**

**THE DEGREE OF BACHELOR OF COMMERCE**

**HBF 2306: PROJECT APPRAISAL**

**DATE: JULY 2015 TIME: 2 HOURS**

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE (30 MARKS)**

1. Under what circumstances does a project guarantee value for money? [2 marks]
2. What is the benefit of project appraisal to an enterprise or a partnership? [3 marks]
3. Why are after tax cost flows considered in project evaluation acid appraisal? [2 marks]
4. Distinguish between mutually exclusive projects and independent projects. [3 marks]
5. State the reasons for capital rationing. [3 marks]
6. In replacement decisions distinguish between incremental salvage value and

Incremental savings. [2 marks]

1. Distinguish between real cashflows and money cashflows. [2 marks]
2. What are the limitations of Capital Assets Pricing Model (CAPM). [4 marks]
3. What are the limitations of Portfolio Theory [4 marks]
4. If a project costing Ksh.100,000/= is undertaken with a money rate of 10%.

If inflation rate is 7%, what is the real return on the investment? [5 marks]

**QUESTION TWO**

1. Highlight the assumptions of Capital Asset Pricing Model. [5 marks]
2. The possible returns of a project and market returns under three possible

states of nature are as follows:

|  |  |  |
| --- | --- | --- |
| Probability | % market returns | % project  returns |
| 0.2 | 15 | 10 |
| 0.5 | 13 | 16 |
| 0.3 | 25 | 30 |

The risk free rate is 9%. Determine the required return of project.

Rp = Rf +  (ERm - Rf) and comment. [9 marks]

1. A decision by O Company that operates under the constraint of capital

rationing has independent projects to choose from. The Company has

£20 million available for capital investment during the current period.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Project | A | B | C | D | E | F | G |
| Investments (Million) | 2.5 | 10 | 5 | 10 | 12.5 | 2.5 | 5 |
| Present Value  (PV) | 3.25 | 10.825 | 7.575 | 12.35 | 13.35 | 3 | 5.9 |

Considering NPV and PI which is the best method. [6 marks]

**QUESTION THREE**

1. You have an investment option for which the outlay and cashflows are uncertain.

The analyst has produced the subject probability assessment given in the table

below:

|  |  |  |  |
| --- | --- | --- | --- |
| Probability | Outlay amount  (Ksh.) | Probability | Amount of Cashflows |
| 0.4 | 240,000 | 0.2 | 42,000 |
| 0.3 | 300,000 | 0.5 | 50,000 |
| 0.2 | 360,000 | 0.3 | 56,000 |
| 0.1 | 420,000 |  |  |

**Required:**

Decision Tree, Expected Net Present Value and the Standard Deviation. [12 marks]

1. Com-Tech Company Ltd is in the telecommunication industry. The company’s balance sheet as at 31st March 2013 is as follows:

Liabilities and owners’ Equity Assets

Ksh. (000) Ksh.(000)

Current liabilities 12,500 Current Assets 32,500

18% Debentures Net Fixed Assets 42,875

(Sh.1000 Par) 16,000

10% Prof. shares 6,250

Ordinary shares

(sh.10 par) 12,500

Retained Earnings 28,125

75,375 75,375

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**Additional information:**

1. The debentures are now selling at Sh.950 in the market and will be

redeemed 10 years from now.

1. By end of last period the company had released and paid Ksh.5 as

dividend per share. The dividends are expected to grow at annual

rate of 10% in the foreseeable future. Currently the company’s shares

are trading at Ksh.38 per share at the local securities exchange.

1. The performance shares were floated 2008 and their prices remained

constant.

1. Most banks are leading money at an interest rate of 22% per annum.
2. The corporation tax rate is 30%.

**Required:**

Calculate the market weighted average cost of capital for the firm. [8 marks]

**QUESTION FOUR**

1. Mumias Milling Company purchased a grinder three years ago at a cost of

Ksh.3.5 million. The grinder had a useful life of 8 years at the time of purchase.

It is being depreciated at 15% p.a. on declining balance. The Company is

Considering replacing it with a new grinder costing Kshs.7 million with

expected usage life of 5 years.

Due to increase in efficiency profit before depreciation and tax is expected to

increase by Ksh.400,000 p.a. The old and new grinder will be depreciated at

25% p.a. on declining balance for tax purposes.

The salage value of the grinder is estimated at Ksh.210,000. If the market value

of the old grinder is Ksh.400,000 and is estimated to have a zero salvage value

after five years. The company’s tax rate is 30% and the after tax cost of capital

is 12%.

Should the grinder be bought? [16 marks]

1. S Form Limited is evaluating a project that requires Ksh.550,000.

The expected cashflows are Ksh.250,000 at today’s price p.a. for 4 years.

However, there are expected to rise by 5.5.% per annum because of inflation.

The firm’s cost of capital is 14%.

**Required:**

Calculate the Net Present Value when the real cashflows are discounted

at real rate. [4 marks]

**QUESTION FIVE**

1. Flagwaver PC is considering whether to establish a subsidiary in Slovenia

at a cost of £30,000,000. The subsidiary will run for four years and the net

cashflows from the project are shown below:

|  |  |
| --- | --- |
| Year | Net Cashflows (ᵮ) |
| 1 | 4,800,000 |
| 2 | 6,834,000 |
| 3 | 12,600,00 |
| 4 | 12,780,000 |

There is a withholding tax of 10% on remitted profits and the exchange

rate at £1: ᵮ 1.5. At the end of the fourth year, the Slovenian Government

will buy the plant for ᵮ 18,000,000. The later amount can be repatriated

free of withholding taxes.

If the discount rate is 15%, what is the Net Present Value of the project in £. [12 marks]

1. Discuss types for Capital Rationing. [8 marks]