



MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY

P.O. Box 972-60200 – Meru-Kenya.

Tel: +254(0) 799 529 958, +254(0) 799 529 959, +254 (0)712 524 293

Website: www.must.ac.ke Email: info@mucst.ac.ke

UNIVERSITY EXAMINATIONS 2023/2024

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR DEGREE OF BACHELOR
OF ECONOMICS

BEC 3451: PUBLIC FINANCE MANAGEMENT AND FISCAL POLICY

DATE: APRIL 2024

TIME: 2 HOURS

INSTRUCTIONS: Answer Question ONE and any other TWO questions.

QUESTION ONE (30 MARKS)

- a) Kenya and Sudan have chosen to organize their electricity supply industries in different ways. In Kenya electricity supplies are provided by a nationalized industry (KPLC). On the other hand, in Sudan electricity supplies are provided by a number of private sector companies.

Required

- i. Explain how the objectives of the nationalized industry in Kenya might differ from those of the private sector companies in Sudan. (5marks)
 - ii. Briefly discuss whether investment planning and appraisal techniques are likely to differ in the nationalized industry and private sector companies. (5marks)
- b) Discuss the role of the public in the government's budget making process. (10marks)
- c) Discuss the role of public finance in developing countries (10 marks)

QUESTION TWO(20MARKS)

- a) Fiscal policy refers to the manipulation of government revenue and expenditure. What policy objectives does it seek to achieve (6 marks)

- b) Wandati ltd. is considering three possible capital projects for next year. Each project has a 1-year life, and project returns depend on next year's state of the economy. The estimated rates of return are shown below.

STATE OF THE ECONOMY	PROBABILITY OF OCCURRENCE	RATE OF RETURN		
		A	B	C
Recession	0.25	10%	9%	14%
Average	0.50	14	13	12
BOOM	0.25	16	18	10

Required:

- a. Find each project expected rate of return and standard deviation.
- b. Compute the correlation coefficient between
 - i. A and B
 - ii. A and C
 - iii. B and C
- c. Compute the standard deviation of the portfolio (14marks)

QUESTION THREE(20MARKS)

- a) Discuss the burden of public debt on the society (8 marks)
- b) Mumias Sugar Company- a public Company, purchased a grinder 3 years ago at a cost of Sh.3.5 million. The grinder had a life of 8 years at the time of purchase. It is being depreciated at 15% per year on a declining balance. The company is considering replacing it with a new grinder costing Sh.7 million with an expected useful life of 5 years.

Due to increased efficiency, the profit before depreciation is expected to increase by Sh.400,000 a year. The old and new grinders will now be depreciated at 25% per year on a declining balance for tax purposes.

The salvage value of the new grinder is estimated at Sh.210,000. The market value of the old grinder, today, is Sh.4 million. It is estimated to have a zero salvage value after 5 years.

The company's tax is 30% and the after tax cost of capital is 12%

Required

Should the new grinder be bought? Explain. (12 marks)



QUESTION FOUR(20MARKS)

- a) Discuss any five mandates of the office of the controller of budget in Kenya (10 marks)
- b) The county government of Meru fully owned Baite Miraa Juice Ltd. is in the process of evaluating two alternative machine models, Alpha and Beta for possible purchase in order to increase the company's production level.

The following additional information is available:

1. Alpha costs Shs. 3,800,000 and will have a useful life of four years.
2. Beta costs Shs. 8,000,000 and will have a useful life of six years.
3. Both machines have no salvage value after their useful lives.
4. An investment in working capital amounting to Shs. 825,000 will have to be made at the beginning of the first year of the machine's life regardless of the model purchased.
5. The estimated pre-tax cash inflows for each of the machines are shown below:

Year	Machine	
	Alpha Shs.	Beta Shs.
1	2,590,000	4,300,000
2	2,880,000	3,290,000
3	3,050,000	3,200,000
4	2,950,000	3,700,000
5	-	4,850,000
6	-	4,420,000

N.B The cost of capital to the company is 12% and the corporation tax rate is 30%.

Required:

- i Calculate the undiscounted payback period for each machine model.
(4marks)
- (ii) Calculate the net present value (NPV) for each machine model. (6 marks)

QUESTION FIVE(20MARKS)

- a) Since the promulgation of the Kenya constitution (2010), there has been a more involvement of parliament through the parliamentary budget committee and better consultations with stakeholders in the budget making process. Discuss the budget making process in Kenya today. (10 marks)



b) Discuss the assumptions of the following asset pricing models (10 marks)

- i. Capital Asset Pricing Model
- ii. Arbitrage Pricing Theory

