



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

THIRD YEAR SPECIAL /SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF ECONOMICS

EAE 303: MANAGERIAL ECONOMICS

DATE: 23/7/2019

TIME: 11:00 – 1:00 PM

INSTRUCTIONS:

- i) Answer question one (Compulsory) and any other two questions
- ii) Do not write on the question paper
- iii) Show your working clearly

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) Project A has the following cashflows over its useful life of 3 years. The market value (Abandonment value) has also been given.

<i>Year</i>	<i>Cash flow Sh`000'</i>	<i>Abandonment value Sh`000'</i>
0	(4,800)	4,800
1	2,000	3,000
2	1,875	1,900
3	1,750	0

Required:

Determine when to abandon the project assuming a discount rate of 10%. (10 marks)

- b) Assume a project costs Sh 30,000 and yields the following uncertain cashflows:

Year	Cashflow
1	12,000
2	14,000
3	10,000
4	6,000

Assume also that the certainty equivalent coefficients have been estimated as follow $\alpha_0 = 1.00$

α_1	=	0.90
α_2	=	0.70
α_3	=	0.50
α_4	=	0.30

The risk-free discount rate is given as 10%

Required

Compute the NPV of the project (10 marks)

- c) Differentiate between the monopolistic and oligopolistic market structures. (10 marks)

QUESTION TWO (20 MARKS)

A company is considering two mutually exclusive projects requiring an initial cash outlay of 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.

YEAR	1	2	3	4	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

- The payback period
- The average rate of return
- The net present value
- Profitability index
- The internal rate of return

Which project should be accepted? Why?

QUESTION THREE (20 MARKS)

- a) Using a diagram explain the product life cycle pricing strategy (10 marks)
- b) A company is considering manufacturing 2 mutually exclusive products A and B. Product A is a watch band specifically designed to fit on watches manufactured by the firm only. Product B is a watch band that is designed to be adapted to a variety of watches including those produced by competitors. Expected investment is \$100,000 for each of the products. Expected cash flows are \$20,000 per year for product A. The expected value for B is \$23,000 for 8 years also.
- The coefficient of variation (CV) for A is 1.0 and for B is 1.5. Because of high risk attached to B the risk adjustment to B is $k=15\%$ and for product A, $k=10\%$. Which project would you recommend to the company for investment? (10 marks)

QUESTION FOUR (20 MARKS)

- a) Briefly explain the assumptions of oligopoly market structure. (8 marks)
- b) With the aid of a diagram explain the equilibrium of a monopoly market structure in the short run. (12 marks)

QUESTION FIVE (20 MARKS)

- a) Explain the limitations of direct interview method (8 marks)
- b) Briefly explain the various steps involved in estimating demand by regression analysis. (8 marks)
- c) Clearly distinguish between consumer clinic and market experiments. (4 marks)