



# TECHNICAL UNIVERSITY OF MOMBASA

---

SCHOOL OF BUSINESS

DEPARTMENT OF ACCOUNTING & FINANCE

**UNIVERSITY EXAMINATION FOR:**

**BACHELOR OF TECHNOLOGY IN MECHANICAL ENGINEERING**

**BFI 4204 : ECONOMICS & ACCOUNTING**

**END OF SEMESTER EXAMINATION**

**INSTITUTIONAL BASED**

**SERIES: APRIL 2017**

**TIME: 2 HOURS**

**DATE:** Pick Date *Apr 2017*

## **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 ONE (COMPULSORY)**

**i) Answer the following;**

- a) Economics is both a science and an art, explain **(2 Marks)**
- b) Explain the law of supply **(2 Marks)**
- c) Define the law of demand **(2 Marks)**
- d) Explain the factors that lead to an upward shift in the supply curve **(2 Marks)**
- e) Distinguish between point elasticity of demand & cross elasticity of demand **(2 Marks)**

**ii) Using the rate of return of 15 percent, determine:**

- a) The future value of shs 2,400,000 invested now for a period of 5 years and another shs 300,000 two years from now **(5 Marks)**
  - b) The future value at the end of 10 years of an annual deposit of shs 500,000 **(3 Marks)**
  - c) The future value of a deposit of shs 250,000 made at the beginning of each year for 4 years **(2 Marks)**
- iii) Differentiate between contributory and non-contributory insurance **(4 Marks)**
- iv) List three advantages of contributory insurance **(3 Marks)**
- v) List three disadvantages of non-contributory insurance **(3 Marks)**

**QUESTION TWO**

- a) Explain the following costs by use of examples
  - i. Fixed costs **(2 Marks)**
  - ii. Variable costs **(2 Marks)**
  - iii. Semi-variable costs **(2 Marks)**
  - iv. Direct costs **(2 Marks)**
  - v. Indirect costs **(2 Marks)**
- b) Discuss basic assumptions of cost volume profit analysis **(5 Marks)**
- c) Elaborate the practical application of marginal costing **(5 Marks)**

**QUESTION THREE**

- a) A company produces single product which sells for shs 20 per unit. Variable cost is shs 15 per unit and fixed overhead for the year is shs 630,000.

**Required**

- i. Calculate sales value needed to earn a profit of 10% on sales **(5 Marks)**
  - ii. Calculate sales price per unit to bring BEP down to 120,000 units **(2 Marks)**
  - iii. Calculate margin of safety sales if profit is shs 60,000 **(3 Marks)**
- b) Distinguish between job costing and batch costing **(10 Marks)**

#### QUESTION FOUR

An organization is considering a capital investment in new equipment. The estimated cash flows are as follows.

Year	Cash flow
0	(240,000)
1	80,000
2	120,000
3	70,000
4	40,000
5	20,000

The company's cost of capital is 9%.

- a) Calculate the NPV of the project to assess whether it should be undertaken **(10 Marks)**
- b) List advantages and disadvantages of using NPV **(10 Marks)**

#### QUESTION FIVE

- a) What is meant by cost centre **(2 Marks)**
- b) Discuss cost classification based on variability and controllability **(6 Marks)**
- c) You have been asked to install a costing system in a manufacturing company, what practical difficulties will you expect and how will you propose to overcome them **(8 Marks)**
- d) Distinguish between controllable and uncontrollable costs **(4 Marks)**