



# MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

FIFTH YEAR SECOND SEMESTER EXAMINATION FOR  
BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

EMM 506: MANUFACTURING MANAGEMENT

DATE: 14/5/2019

TIME: 8.30-10.30 AM

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## INSTRUCTIONS

Answer question **ONE** (*Compulsory*) and any **other two** questions

### QUESTIONS ONE (COMPULSORY) (30 MARKS)

A survey conducted in the recent past indicates that most businesses in Kenya have a very short lifespan ranging between 5-10 years. This has been attributed to the fact that investors only consider to put some safely somewhere so long as they are assured of a return. In Kenya a big proportion of the investors have ventured in manufacturing business while others have ventured in Agriculture and even in the service industry. In either cases there is production taking place after which the outputs are traded in the market place. These market places are just an interaction of sellers and buyers. It's assumed that buyers will always buy from the cheapest sources while the sellers will aspire to maximize profits by selling at the highest possible prices. In some situations the selling prices are set by the state while in open market economies, the prices are determined by the forces of demand and supply.

- a) In the light of the above discuss **four** factors involved in the production process. (8 marks)
- b) “The underlying principle in microeconomics theory is that of scarcity and choice”  
Discuss. (8 marks)
- c) Discuss three functions of money in an economy (6 marks)
- d) Explain the concept of Break-Even Analysis and its importance to a firm (8 marks)

### QUESTION TWO (20 MARKS)

- a) It has been established in economics theory that satisfaction measured over time is not constant. Discuss diminishing marginal utility with respect to a consumable of your choice (8 marks)
- b) Investors need to identify several investment options and then select the most feasible investment decision. Discuss four investment appraisal methods that he can use (12 marks)

### QUESTION THREE (20 MARKS)

Company XYZ manufactures and sells an industrial detergent at a retail price of Ksh. 150/-. The variable cost of producing one unit is Kshs. 50/-. The total fixed overheads have been estimated at Kshs. 300,000/-.

#### Required

- a) Determine the Break-Even point in Kshs. (8 marks)
- b) How many units of output does the company require to produce and sell to make a profit of Kshs, 260,000/-? (8 marks)
- c) State and explain the assumptions in the BEP analysis (4 marks)

### QUESTION FOUR (20 MARKS)

Company A acquired the following types of machinery in January 2018.

A Heavy commercial lorry valued Ksh. 12,400,000/-

A Tractor at a cost of Ksh 855,000/-

Two Pick-ups at a cost of Ksh 3,600,000/-

Plant and Machinery at Ksh. 4,000,000/-

Four Computers at a cost of Ksh. 300,000/-

The company depreciates all its assets using the diminishing balance method at 10% p.a

#### Required:

- a) Draw fixed assets schedules as at end of 2018 and 2019 (14 marks)
- b) Discuss three methods for calculating depreciation (6 marks)

### QUESTION FIVE (20 MARKS)

- a) Discuss Abraham Maslow's hierarchy of needs explaining each level (10 marks)
- b) A good manager must embrace a good leadership style so as to achieve the organizational goals. Discuss four leadership styles that he may adopt (10 marks)