



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

FIFTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

EMM 506: MANUFACTURING MANAGEMENT

DATE: 12/8/2021

TIME: 8.30-10.30 AM

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## INSTRUCTIONS:

Answer question one and any other two questions.

### QUESTION ONE (30 MARKS)

In recent times there has been a wave of rampant business collapse and other cases businesses operating at losses. The main causes of this include the inability to cope with competition and at the same time operating at a loss. 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. The forces of demand and supply determine the prices as the government no longer regulates prices except in some unique circumstances

- a) In the light of the above discuss **five** factors which influence the **supply** of product. (10 marks)
- b) In microeconomics theory, human wants are unlimited, while the resources available are limited. In the light of this statement discuss the concept of scarcity, choice, and opportunity cost as applied in this context (12 marks)
- c) Discuss the term Utility in Economics (8 marks)

### QUESTION TWO (20 MARKS)

- a) Economics theory established 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 three investment appraisal methods that he can use. (12 marks)

### QUESTION THREE (20 MARKS)

ABC Company limited manufactures and sells a household detergent at a retail price of Ksh. 150/-. The direct variable cost of producing one unit is Ksh. 50/-. The total overheads have been estimated at Ksh. 800,000/-, where 20% are variable and the rest fixed.

#### Required

- a) Determine the Break-Even point in Units and Shillings. (8 marks)
- b) How many units of output does the company require to produce and sell to make a profit of Kshs, 400,000/-? (8 marks)
- c) State and explain the main classification of costs in marginal costing (4 marks)

### QUESTION FOUR (20 MARKS)

Company A acquired the following assets in January 2018.

Furniture and fittings Ksh. 700,000/-

Land at a cost of Ksh 6,855,000/-

Saloon car at a cost of Ksh1,600,000/-

Tractor at Ksh. 800,000/-

Four Computers at a cost of Ksh. 280,000/-

The company depreciates all its assets using the diminishing balance method. It applies a depreciation rate of 20% on vehicles and 15% for the other assets.

#### Required:

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

### QUESTION FIVE (20 MARKS)

- a) Discuss Abraham Maslow's Hierachy of needs, clearly outlining its relevance to the management of an organization (12 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 (8 marks)