



MACHAKOS UNIVERSITY

University Examinations for 2021/2022

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING

FIFTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE (ELECTRICAL AND ELECTRONICS ENGINEERING)

EEE 503: INDUSTRIAL MANAGEMENT

DATE: 8/12/2021

TIME: 11:00 – 1:00 PM

INSTRUCTIONS:

This paper consists of FIVE Questions.

Answer Question ONE [30 Marks] and any other TWO Questions [20 Marks Each].

Write your college number on the answer sheet.

This paper consists of 3 printed pages

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

QUESTION ONE (COMPULSORY)(30MARKS)

- a) Production is the key factor for the growth of the nation and to have an optimal and sustainability production in our economy, explain the accelerating factors that affect productivity. (3 marks)
- b) Define the term macroeconomics and state three issues associated with it. (3 marks)
- c) Describe how Taylor has emphasized on scientific management and states its drawback (4 marks)
- d) Explain the role of manager as per Henry Mintzberg recommendation to organization structure. (4 marks)
- e) Decision making has certain impact to the Incumbent industries and new entrant firms, explain its impact to any of organizational systems. (4 marks)
- f) Outline the features of a well-defined goals and objectives for a well-structured organization. (3 marks)

- g) State the advantages of having budgetary control techniques to all organizations. (2 marks)
- h) Enlist six factors internally and externally that contributes the growth of firm as described through economic scale. (3 marks)
- i) Discuss different kind of measurement adopted by the production Engineer in analyzing the performance of the firms. (4 marks)

QUESTION TWO (20 MARKS)

- a) Explain three different kinds of measuring productivity in a processing sector. (6 marks)
- b) Discuss the features of a continuous type of manufacturing system hence explain how it differs with intermittent system. (8 marks)
- c) Explain how supply and demand curve affect the production. (6 marks)

QUESTION THREE (20 MARKS)

- a) A group of Engineers are intending to set up a small business enterprise to give supports to other organization. Explain various factors that they need to consider before setting up their business. (8 marks)
- b) Planning is an intellectual process that conscious determine the course of action. Describe how planning process attributes to the goal realization in an organization. (5 marks)
- c) Organization process establishes the relationship among the members of enterprise where by it gets involvement of group identification, dividing them among the individual, creating authority and responsibility among themselves to accomplish the organizational objective. Describe the devised step in achieving the organizational process. (7 marks)

QUESTION FOUR (20 MARKS)

- a) Productivity in a well set up organization is the key in achieving goals and objectives of the organization. Managers and the head of section line are involved in attributing such productivity. In your own words, demonstrate how productivity through employee's motivation can be enhanced and optimized. (8 marks)
- b) Discuss various metric tools that are used by any organizational sector to promote the growth through optimum use of the available resources. (4 marks)
- c) Explain the characteristic, advantages and disadvantages of leadership style in our core of organization (8 marks)

QUESTION FIVE (20 MARKS)

- a) Describe how the firm set up can be strengthened through capacity planning, resource allocation and scheduling. (8 marks)
- b) Explain how aforementioned models have been devised as the forecasting tool. (12 marks)
 - i) Replacement models
 - ii) Queuing theory
 - iii) Transport and simulation models