

MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year SCHOOL OF BUSINESS AND ECONOMICS DEPARTMENT OF BUSINESS ADMINISTRATION FOURTH YEAR FIRST SEMESTER EXAMINATION FOR BACHELOR OF COMMERCE

BMS 401: PRODUCTION AND OPERATIONS MANAGEMENT

DATE: 13/8/2021 TIME: 2.00-4.00 PM

INSTRUCTIONS:

- This paper consists of two sections
- Section A is compulsory (30 marks)
- Answer any two questions from section B (Each 20 marks)

SECTION A

QUESTION ONE (30 MARKS)

In order to stay successful in the face of maturing products, companies have to obtain new ones by a carefully executed new product development process. But they face a problem; although they must develop new products, the odds weigh heavily against success. Of thousands of products entering the process, only a handful reach the market. It is therefore of crucial importance to understand consumers, markets and competitors in order to develop products that deliver superior value to customers. In other words, there is no way around a systematic, customer-driven new product development process for finding and growing new products.

Required:

- a) Explain eight major steps involved in new product development process (8 marks)
- b) Describe five challenges faced by companies in New Product Development (10 marks)
- c) In order to develop products that deliver superior value to customers, it is crucial to understand the customer, markets and competitor. Explain. (9 marks)
- d) Explain three criteria that a New Product idea for a company must meet. (3 marks)

SECTION B

QUESTION TWO (20 MARKS)

- a) Describe three types of plans according to their scope. (12 marks)
- b) Giving clear examples, explain why capacity planning is important for any organization.

(8 marks)

QUESTION THREE (20 MARKS)

- a) Explain five principles of sound plant layout. (10 marks)
- b) Describe five inputs to operations scheduling in an organization. (10 marks)

QUESTION FOUR (20 MARKS)

- a) Explain five secondary factors that should be considered before deciding on the location of a plant. (10 marks)
- b) Discuss five importance of quality control in an organization (10 marks)

QUESTION FIVE (20 MARKS)

- a) Explain five factors that determine effective capacity of an organization. (10 marks)
- b) Identify five sections of the society and explain how efficient production management will benefit each of them. (10 marks)