# UNIVERSITY OF SWAZILAND FACULTY OF COMMERCE DEPARTMENT OF BUSINESS ADMINISTRATION MAIN EXAMINATION

## **DECEMBER 2016**

TITLE OF THE PAPER : OPERATIONS MANAGEMENT 1

DEGREE : BACHELOR OF COMMERCE

COURSE : BA 438 AND BA 506 (IDE)

TIME ALLOWED : THREE (3 HOURS)

Instructions:

- 1. THIS PAPER CONSIST OF SECTION A AND SECTION B)
- 2. SECTION A IS CASE STUDY AND IT IS COMPULSORY QUESTION
- 3. ANSWER ANY THREE QUESTIONS FROM SECTION B

Note: You are reminded that in assessing your work, account will be given of accuracy of language and the general quality of expression, together with layout and presentation of your final answer.

THIS PAPER MUST NOT BE OPENED UNTIL THE INVIGILATOR HAS GRANTED THE PERMISSION

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#### **SECTION A**

#### **Question 1 Compulsory**

#### Read the case study and Answer all questions thereafter

Joy has worked for the same Matsapha Manufacturing Company for almost 20 years. Although the company has gone through some tough times, things were starting to turn around. Customer orders were up, and quality and productivity has improved again from what has been only a few years earlier following the company's wide quality improvement program.

The companies use a model machine and equipment to produce quality production. It was one of the lead companies in the food manufacturing in Swaziland. The managing directors often scout for talented employees from other companies sometimes head hunt the students from UNISWA. He normal attends annual graduation ceremonies.

Currently, the Operation Manager wants to increase productivity by acquiring model equipment that uses technology such computer system. He wants a system that he case link with his office so that he can able monitor and evaluate the production process. He wants to ensure that this system should be having more competitive advantage than the company's rivals.

- a. Identify and discuss five issues affecting operations management today. 20 marks
- **b.** Factors such as Capital, Quality and technology can affect productivity. Identify and discuss any other five factors that can affect the productivity of Matsapha Manufacturing Company. **20 marks**

#### Section **B**

#### **ANSWER ANY THREE (3) QUESTIONS FROM THIS SECTION**

### **Question 2**

The University of Swaziland's Operations has a major influence on competitiveness. Identify and explain 10 areas on how operations can influence the competitiveness of the University? **20 marks** 

## **Question 3**

Productivity is linked to the forecasting of the products and services. Forecasting is basically predicting the future demand of either a service or a product. Organization will predict the future demand of a product / service and the plan around it. The Operations manager of Beverages in Swaziland wants to focus on the future production of their products.

- **a.** Identify and explain six steps for forecasting process the operation manager of Beverages can employ in projecting the next week production. **12 marks**
- b. Facility layout refers to configuration/ alignment / arrangement of departments, work centers and equipment with particular emphases to movement work through the system. The basic objectives of layout design are to facilitate the smooth flow of work, work material and information through the system. The three basic types of facility design layout include Product, Process and Fixed position. Explain the meaning of Product, and Process designing facility layout. 8 marks

## **Question 4**

Entrepreneur in Swaziland prefer to standardize their product or service for customers. In most cases there are advantages and disadvantages of standardization of their products and services. One of the key changes is the differentiating the services and products rendered to different customers.

- a. Discuss three advantages and three disadvantages of standardization of product and services. 12 marks
- Explain any difference between service design and product design. 8
  marks

#### **Question 5**

#### Determine the utilization and efficiency for each of the situations

- a. A loan processing operation that processes an average of 7 loans per day. The operation has a design capacity of 10 loans per day and effective capacity of 8 loans per day. 3 marks
- **b.** A furnace repair team that service an average of four furnaces a day if the design capacity is six furnaces a day and effective capacity is five furnaces a day. **3 marks**
- c. Would you say that systems that have higher efficiency ratios than other systems will always have high utilization ratios than those other systems? Explain with example. 4 marks
- d. Identify and discuss any five factors determinant / impact of effective capacity 10 marks