# TECHNICAL UNIVERSITY OF MOMBASA

## SCHOOL OF BUSINESS

### DEPARTMENT OF MANAGEMENT SCIENCE

### **UNIVERSITY EXAMINATION FOR:**

FIRST YEAR FIRST SEMESTER EXAMINATION FOR DEGREE OF MASTER OF SCIENCE IN PROCUREMENT AND SUPPLIES MANAGEMENT

BMS 5202: OPERATIONS MANAGEMENT

END OF SEMESTER EXAMINATION

**SERIES:**DECEMBER,2016

TIME:3HOURS

#### **Instructions to Candidates**

You should have the following for this examination *-Answer Booklet, examination pass and student ID*This paper consists of Choose No questions. AttemptChoose instruction **Answer question ONE Compulsory and any other THREE questions** 

Do not write on the question paper.

#### **Question ONE**

- a). Describe the two Forecasting methods and indicate their relevance to operations management. 15 marks
- b). Describe the two main basic steps in designing a quality product.

10 marks

## **Question Two**

As an organization develops plans and strategies to deal with the opportunities and challenges that arise in its particular operating environment, it should design a system that is capable of producing quality services and goods in the quantities demanded and in the time frames necessary to meet the businesses obligations. In view of this, Justify.

25 marks

#### **Question THREE**

Understanding dimensions that customers use to judge the quality of a product or service helps organizations meet customer expectations. In light of the above, explain the features of

### **Question FOUR**

- a).Mr. Khamisi argues that having good quality is **a** competitive advantage against others who offer similar products or services in the marketplace. Justify this.

  15 marks
- b). Describe advantages of having an effective inventory planning system within a business. 10 marks

#### **Question FIVE**

- a). Musyoka Co produces chemicals to sell to wholesalers. One of the raw materials it buys is sodium nitrate which is purchased at the rate of \$22.50 per ton. Biotech's forecasts show a estimated requirement of 5,75,000 tons of sodium nitrate for the coming year. The annual total carrying cost for this material is 40% of acquisition cost and the ordering cost is \$595. What is the Most Economical Order Quantity?

  15 marks
- b). Facility Location is the right location for the manufacturing facility; it will have sufficient access to the customers, workers, transportation. In view of this, describe the critical factors. 10 marks