



# TECHNICAL UNIVERSITY OF MOMBASA

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SCHOOL OF BUSINESS

DEPARTMENT OF MANAGEMENT SCIENCE

**UNIVERSITY EXAMINATION FOR:**

**BACHELOR OF SCIENCE IN MARITIME MANAGEMENT (COMMERCIAL)**

**BPM 4102: PRINCIPLES OF OPERATIONS AND PRODUCTION  
MANAGEMENT**

**END OF SEMESTER EXAMINATION**

**SERIES: DECEMBER 2016**

**TIME: 2 HOURS**

**DATE: Pick Date Dec 2016**

## **Instructions to Candidates**

You should have the following for this examination

*-Answer Booklet, examination pass and student ID*

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

**Do not write on the question paper.**

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## **Question ONE (COMPULSORY)**

### **Case Study; Cadbury Schweppes Production Method**

Cadbury Schweppes is a multinational soft drinks (beverages) and confectionery business that is based in the UK. The business is a public limited company. It is involved in the manufacture, marketing and distribution of its many branded products. Cadbury Schweppes now employs over 40000 people and its products are available in almost 200 countries. The company's products can be divided into:

- Beverages (carbonated soft drinks and non carbonated soft drinks (waters and fruit juices)
- Confectionery (chocolate products, sugar products, chewing gum)

Much of Cadbury Schweppes' manufacturing still takes place in the UK, Australia North Africa. However, in the 1990s the company moved some of its production to Russia, Poland, Argentina and China, countries with emerging economies. To satisfy most of its shareholders, Cadbury Schweppes' has set out a strategy to help achieve its objective. This strategy consists of: •Creating strong regional positions through organic growth,

acquisitions and disposals, •Developing strong brands through marketing, •Expanding its marketing share through innovation in products and packaging, •Regularly updating its product portfolio.

**Production;** Despite manufacturing its goods in large quantities, Cadbury Schweppes uses batch rather than flow production methods. The company must ensure the products are of high quality. Not only are there strict laws about how foodstuff is made, but also Cadbury Schweppes would not want to damage its reputation by allowing inferior products to be sold. Cadbury Schweppes undertakes extensive research and development (R&D) to develop new products and to find ways of manufacturing existing brands more efficiently. Cadbury Schweppes uses the services of a specialist R& D business based at for its UK confectionery business

Read the Case study of Cadbury Schweppes and answer the following questions

- a) Describe the differences between batch and flow production. (10 Marks)
- b) Critically evaluate the reasons why Cadbury Schweppes uses batch production when making chocolate bars. (10 Marks)
- c) One of the following two quality control methods would be better for Cadbury Schweppes. Choose one method and discuss its benefits.
  - i) Checking samples of the products after they have been made
  - ii) Making workers responsible for the quality of their own work (10 marks)

### Question TWO

- a) Explain how the concept of JIT helps the manufacturing system to improve productivity? (10 marks)
- b) State the principles of material handling technique (10 marks)

### Question THREE

- a) Discuss The main functions of MPS (12 marks)
- b) Scheduling strategies vary widely among firms and range from 'no scheduling' to very sophisticated approaches. explain the **FOUR** groupings of scheduling strategies that firms uses (8 marks)

### Question FOUR

- a) The modern dynamic concept of productivity looks at productivity as what may be called "productivity flywheel". Explain. (12 marks)
- b) A company produces 160 kg of plastic molded parts of acceptable quality by consuming 200 kg of raw materials for a particular period. For the next period, the output is doubled (320 kg) by consuming 420 kg of raw material and for a third period, the output is increased to 400 kg by consuming 400 kg of raw material. calculate the productivity during the first, second and third year (8 marks)

## Question FIVE

- a) State the benefits of standardization to Production Planning Department (8 marks)
- b) Managing operations can be enclosed in a frame of general management function. Explain the functions of Operation Manger. (12 marks)