



COLLEGE OF BUSINESS & ECONOMICS
JOHANNESBURG BUSINESS SCHOOL
DEPARTMENT OF BUSINESS MANAGEMENT
FINAL SUMMATIVE ASSESSMENT JUNE 2018

SUBJECT: Business Management 2A
CODE: BMA2A01/BMA12A1
TIME ALLOWED: 2 Hours
TOTAL MARKS: 100

LECTURERS: Prof. D. Poore
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EXAMINER (S): Dr T.N. van der Linde
MODERATOR: Mrs. A. Bosch
NUMBER OF PAGES: 11

INSTRUCTIONS:

1. This is a written close-book assessment.
2. Read the questions carefully and answer what is asked.
3. Answer all the questions:
 - a. Answer all questions in the assessment book provided,
 - b. Answer Section A (Multiple choice) at the back of the assessment book,
 - c. Answer Sections B in the assessment book provided.
4. Number your answers clearly.
5. Write neatly and legibly. Systematic exposition is a prerequisite.
6. The use of a non-programmable calculator is allowed.
7. Write your module code on the front page of the test book.
8. **NB: Questions papers must be handed in together with your answer books.**

The general University of Johannesburg policies, procedures and rules pertaining to closed book written assessments (examinations) apply to this assessment.

SECTION B**[60 MARKS]****QUESTION 1****(15 MARKS)****CASE STUDY**

A paper manufacturer has a coating line with a design capacity of 150 square meters per minute and the line is operated on a 24 hour day, 7 days per week (168 hours per week) basis. The records for a week's production show the following lost production time:

Item	Description	Time lost
1	Machine set-up time	20 hrs
2	Regular preventative maintenance	18 hrs
3	No work scheduled	8 hrs
4	Quality sampling checks	6 hrs
5	Shift change times	6 hrs
6	Breakdown repairs	20 hrs
7	Quality failure investigations	16 hrs
8	Coating material out of stock	8 hrs
9	Labour shortages	8 hrs
10	Paper out of stock	7 hrs

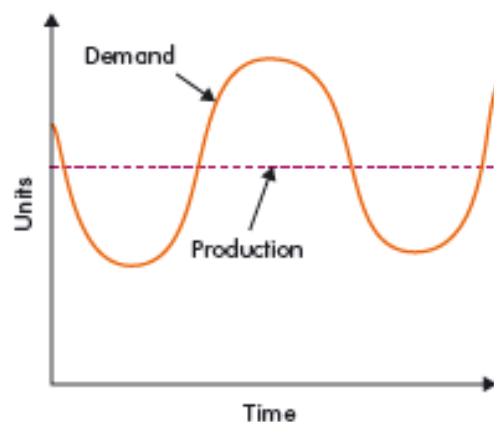
It is required of you to:

- | | | |
|----|--|---------|
| a. | Determine the design capacity of the coating line per week (in meters and hours) | 3 Marks |
| b. | Calculate the effective capacity of the coating line in hours | 3 Marks |
| c. | Determine the actual capacity of the coating line in hours | 3 Marks |
| d. | Compute the efficiency of the coating line | 3 Marks |
| e. | Compute the utilization of the coating line | 3 Marks |

QUESTION 2**(11 MARKS)**

It can be stated that the primary objective of an Operational Manager is to “eliminate waste”, but the operational challenge of operations is to “Match the organizational capacity with demand” for the products and services provided by the organization. This operational challenge is presented in the figure below.

Figure: Demand and capacity



It is required of you to discuss the generic strategies that the organization can implement to manage this operational challenge to “marry demand with capacity”.

QUESTION 3

(10 MARKS)

From Adam Smith (1776) – through Henry Ford (1914) and the current “mass production” of goods and services led to a world of waste, particular in terms of input (raw materials) – transformation – output (finished goods). In response to the waste created organisations (and societies) introduced various methods such as lean production to eliminate waste and agile production to be flexible. Due to increased environmental regulation organizations also understand that waste does not only occur in the input –transformation-output process but also when a physical good achieve its “end of life” point. To help eliminating this waste the concept of “reverse supply” was developed.

It is required from you to **recall** and **discuss** the tasks that are commonly found in “reverse supply”.

QUESTION 4

(16 MARKS)

No operational manager likes to run out of inventory. But for the blood services, such as the South African National Blood Services (SANBS), the consequences of running out of blood can be serious. Many people owe their lives to blood transfusions that were made possible by the efficient management of blood, stocked in a network that stretches from the donation centres through to the blood bank and eventually to the hospitals where it's needed. The SANBS has three main stages:

- Collection, which involves recruiting and retaining blood donors;
- Processing, which break down blood into its constituent parts (red cells, plasma and platelets), and
- Distribution, which transport blood from blood centres to hospitals.

It is required of you to **identify** and **briefly discuss** the **useful functions** of inventory as well as the **problems** that can be caused by inventory.

QUESTION 5

(8 MARKS)

Managing quality is not cheap. It has been estimated that in 2001 it cost General Electric (GE) somewhere between \$11 billion and \$16 billion to implement its quality management strategy. As quality evolves from being reactive (fixing problems) to proactive (preventing problems) the nature of the cost is changing as well.

It is required of you to **identify** the cost associated with quality with an **example**.

END OF PAPER -