

MAASAI MARA UNIVERSITY

**REGULAR UNIVERSITY EXAMINATIONS**

**2016/2017**

**SCHOOL OF BUSINESS AND ECONOMICS**

**BACHELOR OF BUSINESS MANAGEMENT**

**COURSE CODE: BBM 355**

**COURSE TITLE:PRODUCTION AND OPERATIONS MANAGEMENT**

**DATE: 16thMay, 2017 TIME: 2 HOURS**

**INSTRUCTIONS:**

Attempt question one in section A & any other two Questions in section B: Clear Examples, Calculations and Explanations Are Awarded

Do not write on the exam question paper.

**DATE: MAY 2017 TIME: 2 HOURS**

**INSTRUCTIONS:**

Attempt Question One In Section A & Any Two Other Questions In Section B:

Clear Examples and Explanations Are Awarded:Do not write on the exam question paper.

**SECTION A :( QUESTION ONE IS COMPULSORY)**

**QUESTION ONE**

1. You are involved in restructuring a funeral home: “Narok city mortuary” as a consultant in Operations management process,that is, involves value addition, conversion or transformation of inputs in order to get outputs at any organization; however there should be feedback and control.
2. By use of a well labeled diagram, explain this process. **(4 MARKS)**
3. What category of transformation is this and why? **(2 MARKS)**
4. Explain five key decisions that operations managers will make in this organization? **(5 MARKS)**
5. What will be the supposed challenges in managing these service operations at the funeral home? **(4 MARKS )**
6. With examples explain any four key transformation processes. **(8 MARKS)**
7. How are services different from products  **(2 MARKS )**

**SECTION B (ATTEMPT ANY THREE QUESTIONS IN SECTION B)**

**QUESTION TWO**

1. “Operations is a service; whether a domestic kitchen, shop, a car manufacturer, farm e.t.c”.

Required.

1. Explain the core and value –added classical performance objectives of operations management for a firm. **(6 MARKS)**
2. Explain the three decision that should be made in an ideal organization from production and operations perspective. **(3 MARKS)**
3. How can a company achieve competitive advantage through constrained resources using operations strategy? **(6 MARKS)**

**QUESTION THREE**

1. Explain the various forecasting time horizons. (3MARKS)
2. Explain the seven steps in forecasting **(7 MARKS)**
3. A wholesaler has to supply his customer with 40,000 units of a given product every year; Assume that demand is fixed and known*;* Assume the cost of placing each order is Shs 2.00 while the holding cost per unit is Shs 1.00.

**Required:**

a. Determine the optimum order size using the EOQ model.**(2 MARKS)**

b. Determine total costs incurred at optimum order size.**(2 MARKS)**

1. A student in BBM 447 says. “Right quality, quantity and right time are key objectives of production management” Why? **(1MARKS)**

**QUESTION FOUR**

You are hired as a consultant by Jumuia Resorts to guide them in plant location and Facility lay out decision.

1. What is the management needs for this situation? **(3 marks)**
2. What factors in place could you have in mind as their consultant that will influence plant/facility location? **(6 marks)**
3. The Sample data for delivery distances and times Distance G4S are as shown in the table below.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Distance, mile** | 35 | 24 | 49 | 42 | 30 | 13 | 10 | 30 | 15 | 41 |
| **Cost (kshs.000)** | 16 | 13 | 19 | 18 | 12 | 11 | 8 | 14 | 9 | 16 |

The management wishes to establish the mathematical relationship that explains variations in cost to help them predict the cost as they go global.

**Required**

1. Determine the model relationship. **(5MARKS)**
2. If G4S management predicts that they will cover 12 billion miles next year, how much will be the cost **(1 MARKS)**

**QUESTION FIVE**

1. Explain key durations in capacity, their types and plans too.  **(4 marks)**
2. A glass making factory in Kenya specializing in crystals , is experiencing a substantial backlog and the firm’s management is considering three courses of action:
3. Arrange for subcontracting
4. Construct new facility
5. Do nothing

The correct choice depends largely upon demand, which may be low, medium or high. By consensus, management estimates the respective demand and probabilities as 0.2, 0.4 and 0.4 respectively.

The profit pay off table for the three alternatives is given as follows

|  |  |  |  |
| --- | --- | --- | --- |
|  | **0.2** | **0.4** | **0.4** |
|  | **LOW** | **MEDIUM** | **HIGH** |
| **A** | 20 | 60 | 100 |
| **B** | -160 | 50 | 300 |
| **C** | 40 | 60 | 80 |

REQIRED

1. Advise the management by use of a decision tree**(5 MARKS)**
2. In the sense of materials management show how standardization, simplification and specification works. **(6 marks)**