UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF MANAGEMENT AND FINANCE

Bachelor of Business Administration (Level 1 - Semester 1V) Examination - December 2018 - Repeat

MKT 130[illegible] – Operations Management

Three (03) Hours

Answer ALL questions

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01. i. Briefly explain the role of operations manager in current competitive business environment.

(10 marks)

ii. Disuses four major operations priorities on operations strategy?

(10 marks)

(Total: 20 Marks)

02. i Distinguish between product layout and process layout giving example for each.

(10 marks)

ii. Explain three (03) major variables that should be considered in selecting an operating process with examples.

(10 marks

(Total: 20 Marks)

03. "Quality of a product or service is its ability to satisfy the needs and expectations of the customers."

i. What is meant by continuous improvement? Explain how **Deming Wheel** would be used for continuous improvement.

(10 marks)

ii. "Cost of quality is a tool that has been used in many industries, usually within a total quality management or performance improvement programmes." Explain three (03) main types of cost of quality.

(10 marks)

(Total: 20 Marks)

04. i. Explain why demand forecasting is important for an organization with an example.

(06 marks)

ii Differentiate between quantitative and qualitative forecasting methods.

(05 marks)

iii. Demand of a product for the last 5 periods is given below:

Period	1	2	3	4	5
Demand (units)	100	90	130	110	150

Find the forecast for the sixth period using,

a) Weighted moving average with weights of 0.20, 0.30, and 0.50 for the periods 3, 4, and 5 respectively.

b) Simple three month-moving average.

c) Single exponential smoothing with α = **0.4** and the forecast for period 5 is 100 units.

(09 marks)

(Total: 20 Marks)

05. i. "The core idea of Lean operations is the maximizing customer value while minimizing waste". Briefly discuss the Seven Wastes of Taiichi Ohno

(10 marks)

ii. A small size engineering unit uses 50 litres of furnace per day at Rs. 32 per litre and works 300 days per year. Under this scenario firm's annual consumption (demand) is 15,000 litres. The firm incurs a holding cost of Rs. 20/= per litre every year order cost of Rs. 150/= per order.

a. Calculate the Economic Order Quantity (EOQ) of the firm.

(07 marks)

b. If the lead time of the firm is 07 days, calculate the re-order point

(03 marks)

(Total: 20 Marks)

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