

UNIVERSITY OF KELANIYA - SRI LANKA

Centre for Distance and Continuing Education

Faculty of Commerce & Management Studies

Bachelor of Commerce (Special) Degree Second Year Examination (External) - 2023

April - 2025

BCOM E 2065 - Operations Management

No. of questions: Five (05)

Answer any four (04) questions.

Time: 03 hours

Question No. 01

a) Describe three (03) tasks performed by the operations manager.

(05 Marks)

b) "When creating value for the final customers in operations, both efficiency and effectiveness need to be emphasized." Explain these concepts with relevant examples.

(08 Marks)

c) "Street food in Sri Lanka is a vibrant and essential part of the country's culinary culture, offering a diverse range of affordable and flavorful dishes that reflect the island's rich heritage." How can operations management strategies be applied to improve customer satisfaction of street food businesses in Sri Lanka? Discuss with relevant examples.

(12 Marks) (Total 25 Marks)

Question No. 02

a) Briefly describe three (03) factors behind new product opportunities.

(05 Marks)

b) "Effective evaluation involves assessing key metrics across different stages of product development, from ideation to commercialization." Briefly describe the ways of measuring product development performance.

(08 Marks)

c) Maxi Company is evaluating three potential factories with different production capacities to manufacture a new product. The company wants to assess which factory is most suitable based on capacity utilization and expected profits. The following data have been collected for each factory:

Factory	Kelaniya	Dambulla	Mathale
Production Capacity (Units)	12,000	9,000	13,000
Fixed Cost (LKR)	60 million	45 million	38 million
Variable Cost per Unit (LKR)	9,000	10,000	6,900
Selling Price per Unit (LKR)	17,000	18,000	15,200

Questions:

- i. Calculate the break-even point in units for each factory.
- ii. If the company expects to sell 8,000 units annually, calculate the capacity utilization percentage and profit for each factory.
- iii. Analyze and recommend the most suitable factory based on break-even point, capacity utilization, and expected profits.

(12 Marks) (Total 25 Marks)

Question No. 03

a) Explain the concept of the degree of vertical integration.

(05 Marks)

b) "Favorable working conditions contribute to employee productivity, satisfaction, and overall well-being." Discuss this statement by highlighting the working conditions expected by the employees in the modern world.

(08 Marks)

c) A street food vendor in Sri Lanka sells 10,000 packets of kottu per year. The cost of ordering ingredients is LKR 5,000 per order, and the holding cost per packet per year is LKR 50. Calculate the optimal order quantity to minimize total inventory costs.

(05 Marks)

d) A restaurant chain in Sri Lanka specializes in seafood dishes and requires a steady supply of fresh prawns. The restaurant consumes 50,000 kg of prawns per year. The cost of placing an order with suppliers is Rs: 8,000 per order, and the annual holding cost per kg of prawns is Rs: 120.

Questions:

i. Calculate the Economic Order Quantity (EOQ) for the restaurant.

(04 Marks)

 ii. If the supplier offers a discount of 5% on the purchase price for orders of 5,000 kg or more, should the restaurant take the discount? Assume the cost per kg of prawns is Rs: 1,500, and calculate the total cost (ordering cost, holding cost, and purchase cost) in your analysis.

> (03 Marks) (Total 25 Marks)

Question No. 04

a) Define the concept of Lean Supply Chain Management.

(05 Marks)

b) Discuss Hub-and-spoke system works in logistic management using Sri Lankan examples.

(08 Marks)

c) Following table shows the specific seasonal sales data (based on quarters) of the retail apparel industry in Sri Lanka from 2020 to 2024. Based on that, calculate the seasonal index, and rank the four seasons according to the importance of sales.

Year	2020	2021	2022	2023	2024
1 st Quarter	2.899	1.699	0.701	1.845	0.811
2 nd Quarter	1.234	1.961	1.315	1.900	1.612
3 rd Quarter	1.513	1.662	2.454	2.522	2.491
4 th Quarter	2.612	0.827	1.118	1.992	0.902

(12 Marks) (Total 25 Marks)

Question No. 05

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Write a short notes on the following topics.

- a) Types of Businesses.
- b) Product and Services Redesign.
- c) Process Flow Structures.
- d) Purposes of maintaining inventory.
- e) Service Process Technology.

(Marks 05x05=20) (Total 25 Marks)

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