TRƯỜNG ĐẠI HỌC VĂN LANG

**KHOA: THƯƠNG MẠI**

**ĐỀ THI VÀ ĐÁP ÁN ĐỀ THI KẾT THÚC HỌC PHẦN**

**Học kỳ 3 , năm học 2021 - 2022**

Mã học phần: 213\_7TM0090

Tên học phần: Logistics Quốc Tế

Mã nhóm lớp học phần: 213\_7TM0090\_01

Thời gian làm bài (phút): 75

Hình thức thi: **Trắc nghiệm và tự luận (Đề mở)**

Giảng viên nộp đề thi, đáp án bao gồm cả **Lần 1 và Lần 2 trước ngày 30/6/2022**.

**Format đề thi:**

- Font: Times New Roman

- Size: 13

- Tên các phương án lựa chọn: **in hoa, in đậm**

- Không sử dụng nhảy chữ/số tự động (numbering)

- Mặc định phương án đúng luôn luôn là Phương án A ghi ANSWER: A

**PHẦN I: TRẮC NGHIỆM (7.5 điểm, gồm 25 câu, mỗi câu 0.3 điểm)**

What is a supply chain?

**A. A supply chain consists of all stages involved directly or indirectly, in fulfilling a customer request.**

B. A supply chain consists of all stages involved directly in fulfilling a customer request.

C. A supply chain consists of all elements that contribute to the continuous supply of goods to companies

D. None of the answers.

 ANSWER: A

The objective of Supply Chain Managment is

**A. To coordinate activities within the supply chain to maximize the supply chain’s competitive advantage and benefits to the ultimate consumer.**

B. To coordinate activities within the supply chain to maximize the profit and payout to the shareholders.

C. To ensure that all supply chain opperations perform smoothly no matter the cost.

D. To ensure that the cost of each supply chain operation is as low as possible.

 ANSWER: A

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 ANSWER: A

The following statement is true or false: “Most of the times the entities of a supply chain will have different objectives and these objectives can conflict with each other”.

**A. True**

B. False

 ANSWER: A

The three flows of a supply chain is

**A. Physical flow, Finance flow, and Informantion flow**

B. Physical flow, Informantion flow, and Human resources flow

C. Physical flow, Service flow, and Information flow

D. None of the answers.

 ANSWER: A

Which one of these is an input of Logistics Management?

**A. Financial Resources**

B. Propriety Assets

C. Work-in-progress Inventory

D. None of the answers.

 ANSWER: A

Which one of these is **NOT** an output of Logistics management?

**A. Finished goods**

B. Competitive advantage

C. Time and place utility

D. Efficient movement to customers.

 ANSWER: A

Which one of these is **NOT** a Logistics activity?

**A. Product Marketing**

B. Customer service

C. Demand forecasting

D. Order processing

 ANSWER: A

For the following sale data of the first 6 months in 2021 of a certain store, use an SMA(3) forecasting method to predict the sales number of July:

|  |  |
| --- | --- |
| Month | Sales number (units) |
| 1 | 610 |
| 2 | 620 |
| 3 | 680 |
| 4 | 650 |
| 5 | 630 |
| 6 | 640 |

**A. 640 units**

B. 635 units

C. 650 units

D. None of the answers

 ANSWER: A

For the following sale data of the first 6 months in 2021 of a certain store, use a WMA(3) forecasting method to predict the sales number of July:

|  |  |
| --- | --- |
| Month | Sales number (units) |
| 1 | 590 |
| 2 | 605 |
| 3 | 595 |
| 4 | 615 |
| 5 | 620 |
| 6 | 650 |

With the given weighting as:

|  |  |
| --- | --- |
| W1 | 0.5 |
| W2 | 0.3 |
| W3 | 0.2 |

**A. 634 units**

B. 635 units

C. 623.5 units

D. None of the answers

 ANSWER: A

The following statement is true or false: “For exponential smoothing forecasting technique, the smoothing constant (alpha) should be low when the demand is fluctuating and high when the demand is stable”.

**A. False**

B. True

 ANSWER: A

The following statement is true or false: “For forecasting models, random errors can be easily modeled and explained”.

**A. False**

B. True

 ANSWER: A

High ratio of volume to weight products with high volume and low price are more likely to use which of these distribution structures?

**A. Manufacturer to cash-and-carry whole seller**

B. Manufacturer via small parcels carrier to retail shop

C. Factory direct to home

D. None of the above

 ANSWER: A

A product with high substitutability should have a distribution network that:

**A. Has high stock levels.**

B. Has low stock level.

C. Uses low cost transport modes.

D. None of the above

 ANSWER: A

The timeframe of Strategic supply chain planning is

**A. 5 to 10 years or more.**

B. Between 1 to 5 years.

C. Between 3 to 6 months.

D. None of the above

 ANSWER: A

The focus of Operational supply chain planning is:

**A. Efficiency**

B. Competition

C. Resources

D. None of the above

 ANSWER: A

In the case of a high volume, low variety product in a predictable environment, which type of supply chain is prefered?

**A. A Lean supply chain**

B. An Agile supply chain

C. A Fast suppy chain

D. None of the above

 ANSWER: A

The logistics focus of Lean supply chains is:

**A. Eliminate waste**

B. Customers and market

C. Fluid clusters

D. Stable planning

 ANSWER: A

According to Fisher’s approach (1997), the root cause of problems in supply chain is

**A. The mismatch between the type of product and the type of supply chain**

B. The mismatch between the type of product and the main transportation mode.

C. The mismatch between the type of supply chain and the the main transportation mode.

D. None of the answers

 ANSWER: A

A potential benefit of postponement strategy

**A. Low risk of unsold items**

B. Lower ordering cost

C. Shorter leadtime

D. None of the answers

 ANSWER: A

The Continuous inventory system is one where:

**A. None of the answers**

B. Inventory levels are checked after fixed time intervals.

C. Often uses different order quantities for each time an order is placed.

D. Re-order occurs after invenntory level is checked.

 ANSWER: A

The ABC inventory system is one where:

**A. Inventory levels are based on total annual cost**

B. The most important caterogy is “C”.

C. Re-order occurs after invenntory level is checked.

D. None of the above.

 ANSWER: A

The following statement is true or false: “Quality is a perceptual, conditional and somewhat subjective attribute”.

**A. True**

B. False

 ANSWER: A

Feigenbaum’s Cost of Quality includes:

**A. Failure cost, Appraisal costs, Prevention costs**

B. Failure cost, Internal costs, Prevention costs

C. External cost, Internal costs, Prevention costs

D. None of the above.

 ANSWER: A

In Capacity Lag strategy

**A. Capacity will increase after an increase in demand is noticed.**

B. Capacity will increase when an increase in demand is forecasted.

C. Capacity will stays stable even if demand fluctuate

D. None of the above.

 ANSWER: A

**PHẦN II: TỰ LUẬN (2.5 điểm)**

Amazon sells three models of toy car, the Hond, the Kia, and the Merc. Annual demands for the three products are DH = 6,000 for the Hond, DK = 3,000 units for the Kia, and DM = 600 units for the Merc.

Each model costs Amazon $200. A fixed transportation cost of $2,000 is incurred each time an order is delivered. For each model ordered and delivered on the same truck, an additional fixed cost of $500 per model is incurred for receiving and storage. Amazon incurs a holding cost of 10%.

1. Evaluate the lot sizes that the Amazon manager should order if lots for each product are ordered and delivered jointly (use a single truck for all three products) (1.5 điểm)
2. Also calculate the total annual cost of such a policy (0.5 điểm)

**ĐÁP ÁN TỰ LUẬN**

We have: (Tóm tắt đề bài 0.5 điểm)

Demand: $D\_{H}=6000; D\_{K}=3000; D\_{M}=600$

Common order cost: $S=\$2000$

Product-specific order cost: $S\_{H}=\$500; S\_{K}=\$500; S\_{M}=\$500$

Holding cost: $h=0.1$

Unit cost: $C\_{H}=\$200; C\_{K}=\$200; C\_{M}=\$200$

a. Consider the scenario in which all three products are ordered and delivered on the same truck each time an order is placed.

The combined fixed order cost per order is given by: (0.25 điểm)

$$S^{\*}=S+S\_{H}+ S\_{K}+ S\_{M}=2000+500+500+500=3500 (\$)$$

Next, we calculate the optimal order frequency. Let *n* be the the number placed per year. The optimal value of *n* is (0.5 điểm):

$$n^{\*}=\sqrt{\frac{D\_{H}hC\_{H}+D\_{K}hC\_{K}+D\_{M}hC\_{M}}{2S^{\*}}}=\sqrt{\frac{6000\*0.1\*200+3000\*0.1\*200+600\*0.1\*200}{2\*3500}}=5.24$$

Therefore, the optimal number of order per year is 5.24 times.

For each time, the order quantities of each product are (0.75 điểm):

$$Q\_{H}=\frac{D\_{H}}{n^{\*}}=\frac{6000}{5.24}=1145 (units)$$

$$Q\_{K}=\frac{D\_{K}}{n^{\*}}=\frac{3000}{5.24}=573 (units)$$

$$Q\_{M}=\frac{D\_{K}}{n^{\*}}=\frac{600}{5.24}=115 (units)$$

b. The total annual cost is (0.5 điểm):

$$Total annual cost= \frac{D\_{H}hC\_{H}+D\_{K}hC\_{K}+D\_{M}hC\_{M}}{2n^{\*}}+S^{\*}n^{\*}=18320.61+18340=36660.61 (\$)$$

*Ngày biên soạn: 25 / 06 / 2022*

**Giảng viên biên soạn đề thi: Nguyễn Viết Tịnh**

*Ngày kiểm duyệt:*

**Trưởng (Phó) Khoa/Bộ môn kiểm duyệt đề thi: Nguyễn Viết Tịnh**

- Sau khi kiểm duyệt đề thi, **Trưởng (Phó) Khoa/Bộ môn** gửi về Trung tâm Khảo thí qua email:khaothivanlang@gmail.combao gồmfile word và file pdf (được đặt password trên 1 file nén/lần gửi) và nhắn tin password + họ tên GV gửi qua Số điện thoại Thầy Phan Nhất Linh (**0918.01.03.09**).

- Khuyến khích Giảng viên biên soạn và nộp đề thi, đáp án bằng File Hot Potatoes. Trung tâm Khảo thí gửi kèm File cài đặt và File hướng dẫn sử dụng để hỗ trợ thêm Quý Thầy Cô.