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)**

Which of the following statements is true?

**A. Each product or service will have its own supply chain.**

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 main problem with supply chains management is:

**A. Managing across boundaries**

B. Minimizing costs and maximizing profit

C. Managing across functions

D. Minimizing costs while maintain service level

 ANSWER: A

Which of the following statement is true regarding KAIZEN?

**A. KAIZEN is the process of continuous improvements in small increments.**

B. KAIZEN is not one of the components of TQM

C. KAIZEN is more of a technique than a mindset

D. None of the answers

 ANSWER: A

The following statement is true or false: “Logistics management concerns the management of the physical flow of supply chains.”.

**A. True**

B. False

 ANSWER: A

The which of these flows in a supply chain usually go downstream?

**A. Physical flow**

B. Human resources flow

C. Finance flow

D. None of the answers.

 ANSWER: A

Which one of these is an input of Logistics Management?

**A. Information Resources**

B. Propriety Assets

C. Raw Materials

D. None of the answers.

 ANSWER: A

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

**A. In-process inventory**

B. Competitive advantage

C. Time and place utility

D. Efficient movement to customers.

 ANSWER: A

For the following sale data of the first 6 months in 2021 of a certain store, use an SMA(2) forecasting method to predict the sales number of July:

|  |  |
| --- | --- |
| Month | Sales number (units) |
| 1 | 612 |
| 2 | 620 |
| 3 | 681 |
| 4 | 655 |
| 5 | 632 |
| 6 | 640 |

**A. 636 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 | 620 |
| 5 | 640 |
| 6 | 660 |

With the given weighting as:

|  |  |
| --- | --- |
| W1 | 0.4 |
| W2 | 0.3 |
| W3 | 0.3 |

**A. 642 units**

B. 634 units

C. 628 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 high when the demand is fluctuating and low when the demand is stable”.

**A. True**

B. False

 ANSWER: A

The following statement is true or false: “For forecasting models, all errors cannot be modeled and explained”.

**A. False**

B. True

 ANSWER: A

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

**A. Manufacturer via small parcels carrier to retail shop**

B. Manufacturer to cash-and-carry whole seller

C. Manufacturer via third-party distribution service to retail store

D. None of the answers

 ANSWER: A

A product with high substitutability should **NOT** have a distribution network that:

**A. Has low stock levels.**

B. Has high stock level.

C. Uses high performance transport modes.

D. None of the answers

 ANSWER: A

The timeframe of Tactical supply chain planning is

**A. Between 1 to 5 years.**

B. Between 5 to 10 years.

C. Between 3 to 6 months.

D. None of the answers

 ANSWER: A

The focus of Strategic supply chain planning is:

**A. Competition, Resources, and stakeholders**

B. Efficiency

C. Event

D. None of the answers

 ANSWER: A

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

**A. An Agile supply chain**

B. A Lean supply chain

C. A low cost suppy chain

D. None of the answers

 ANSWER: A

The Process focus of Lean supply chains is:

**A. Work standardisation and comformance to standards**

B. Maximixing autonomy

C. Long term and stable partnerships

D. None of the answers

 ANSWER: A

The dominant cost of Lean supply chains is:

**A. Physical costs**

B. Marketability costs

C. Information costs

D. None of the answers

 ANSWER: A

A potential down side of postponement strategy

**A. None of the answers**

B. Higher ordering cost

C. Shorter leadtime

D. High risk of unsold items

 ANSWER: A

The Continuous inventory system is one where:

**A. Re-order occurs when inventory level reach a certain amount**

B. Inventory levels are checked after fixed time intervals.

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

D. None of the answers

 ANSWER: A

The ABC inventory system isone where:

**A. None of the answers.**

B. The most important caterogy is “B”.

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

D. Inventory levels are based on total sales frequency

 ANSWER: A

The following statement is true or false: “Quality is a objective and definite attribute of goods and services”.

**A. False**

B. True

 ANSWER: A

Feigenbaum’s Cost of Quality includes:

**A. None of the answers.**

B. Failure cost, Internal costs, Prevention costs

C. External cost, Internal costs, Prevention costs

D. Failure cost, Appraisal costs, External costs

 ANSWER: A

In the Postponement strategy, differentiation should occur:

**A. As late in the production process as possible**

B. As early in the production process as possible

C. Both can be true depends of the type of product

D. None of the answers.

 ANSWER: A

Which element is regarded as the “Binding mortar” of TQM

**A. Communication**

B. Recognition

C. Leadership

D. Teamwork

 ANSWER: A

**PHẦN II: TỰ LUẬN (2.5 điểm)**

Tiki sells three models of toy plane, the AirB, the Boin, and the Cond. Annual demands for the three products are DB = 5,000 units for the AirB, DB = 2,500 units for the Boin, and DC = 500 units for the Cond.

Each model costs Tiki $100. 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 $200 per model is incurred for receiving and storage. Tiki incurs a holding cost of 10%.

1. Evaluate the lot sizes that the Tiki 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: $D\_{A}=5000; D\_{B}=2500; D\_{C}=500$

Common order cost: $S=\$2000$

Product-specific order cost: $S\_{A}=\$200; S\_{B}=\$200; S\_{C}=\$200$

Holding cost: $h=0.1$

Unit cost: $C\_{A}=\$100; C\_{B}=\$100; C\_{C}=\$100$

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)

$$S^{\*}=S+S\_{A}+ S\_{B}+ S\_{C}=2000+200+200+200=2600 (\$)$$

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):

$$n^{\*}=\sqrt{\frac{D\_{A}hC\_{A}+D\_{B}hC\_{B}+D\_{C}hC\_{C}}{2S^{\*}}}=\sqrt{\frac{5000\*0.1\*100+2500\*0.1\*100+500\*0.1\*100}{2\*2600}}=3.92$$

Therefore, the optimal number of order per year is 3.92 times.

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

$$Q\_{A}=\frac{D\_{A}}{n^{\*}}=\frac{5000}{3.92}=1276 (units)$$

$$Q\_{B}=\frac{D\_{B}}{n^{\*}}=\frac{2500}{3.92}=638 (units)$$

$$Q\_{C}=\frac{D\_{C}}{n^{\*}}=\frac{500}{3.92}=128 (units)$$

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

$$Total annual cost= \frac{D\_{A}hC\_{A}+D\_{B}hC\_{B}+D\_{C}hC\_{C}}{2n^{\*}}+S^{\*}n^{\*}=10204.08+10192=20396.08 (\$)$$

*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.