**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
## VARIANT 1

THEORETICAL PART:

1. The features of the theory of scientific management by F. Taylor

2. The features of the outsourcing applying in civil aviation.

PRACTICAL PART:

Build six deliveries of aviation spare parts used Inventory Control System (Fixed-Time Period System), when the Basic Data is:
- Demand is 91 250 000 units per year;
- Fixed Order Cost is 50 000 UAH;
- Storage Cost is 0.001 UAH per day;
- Delivery Lead Time is 9 days;
- Delay Time of Delivery is 1 days per 4,5,6 deliveries.
- Period of Control is 365 days.

Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
## VARIANT 2

THEORETICAL PART:

1. The features of the theory of human relations in management by E. Mayo

2. The features of cluster strategy of airport-hubs.

PRACTICAL PART:

According to the initial data given in table. 1, you should calculate the forecast of air freight data for the 4th year. Detail formulas for determining data smoothing, trend smoothing, seasonality estimates and forecast for period 18.

Table 1 – Air freight data

| Month | Year | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| 1 | 335 | 370 | 380 |
| 2 | 340 | 360 | 390 |
| 3 | 345 | 370 | 395 |
| 4 | 345 | 375 | 405 |
| 5 | 365 | 390 | 420 |
| 6 | 375 | 395 | 420 |
| 7 | 380 | 410 | 435 |
| 8 | 395 | 420 | 440 |
| 9 | 390 | 415 | 425 |
| 10 | 380 | 405 | 425 |
| 11 | 375 | 390 | 410 |
| 12 | 360 | 385 | 400 |

Bachelor degree
Specialty 073 Management         Educational Professional Program "Aviation Logistics"

Group _____                  Name, surname_____

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
## <u>VARIANT 3</u>

THEORETICAL PART:

1. The features of the theory of classical management by A. Fayol


2. The features of the liberalization of air transport.


PRACTICAL PART:

Build six deliveries of aviation spare parts used Inventory Control System (Fixed-Order Quantity System), when the Basic Data is:
- Demand is 146 000 units per year;
- Fixed Order Cost is 200 UAH;
- Storage Cost is 0.04 UAH per day;
- Delivery Lead Time is 2 days;
- Delay Time of Delivery is 2 days per 4,5,6 deliveries.
- Period of Control is 365 days.


Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024

Bachelor degree
Specialty 073 Management          Educational Professional Program "Aviation Logistics"

Group _____          Name, surname_____

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
**<u>VARIANT 4</u>**

THEORETICAL PART:

1. The features of the theory of rational management by P. Drucker

2. Formation and management of air navigation infrastructure, types and characteristics of services.

PRACTICAL PART:

According to the initial data given in Table 1, you should calculate the forecast of air freight data for the 4th year. Detail formulas for determining data smoothing, trend smoothing, seasonality estimates and forecast for period 19.

Table 1 – Air freight data

| Month | Year | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| 1 | 320 | 345 | 365 |
| 2 | 325 | 355 | 375 |
| 3 | 340 | 370 | 385 |
| 4 | 340 | 365 | 380 |
| 5 | 355 | 380 | 395 |
| 6 | 360 | 390 | 405 |
| 7 | 375 | 395 | 415 |
| 8 | 375 | 405 | 425 |
| 9 | 380 | 400 | 415 |
| 10 | 365 | 385 | 410 |
| 11 | 360 | 375 | 395 |
| 12 | 350 | 370 | 400 |

Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024

Bachelor degree
Specialty 073 Management          Educational Professional Program "Aviation Logistics"

Group _____                         Name, surname_____

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
## VARIANT 5

THEORETICAL PART:

1. Features of Logistics Management for aviation companies

2. Communication and mutual understanding in aviation.

PRACTICAL PART:

Build six deliveries of aviation spare parts used Inventory Control System (Fixed-Time Period System), when the Basic Data is:
- Demand is 3 650 000 units per year;
- Fixed Order Cost is 5 000 UAH;
- Storage Cost is 0.04 UAH per day;
- Delivery Lead Time is 2 days;
- Delay Time of Delivery is 2 days per 3,5,6 deliveries.
- Period of Control is 365 days.

Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
**VARIANT 6**

THEORETICAL PART:

1. The features of national, bilateral and multilateral regulation of international air transport.

2. The geoeconomic effect on aviation.

PRACTICAL PART:

According to the initial data given in Table 1, you should calculate the forecast of air freight data for the 4th year. Detail formulas for determining data smoothing, trend smoothing, seasonality estimates and forecast for period 29.

Table 1 – Air freight data

| Month | Year | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| 1 | 305 | 340 | 390 |
| 2 | 315 | 345 | 395 |
| 3 | 320 | 350 | 390 |
| 4 | 325 | 355 | 405 |
| 5 | 340 | 375 | 410 |
| 6 | 345 | 370 | 440 |
| 7 | 360 | 390 | 415 |
| 8 | 370 | 400 | 420 |
| 9 | 365 | 405 | 425 |
| 10 | 350 | 380 | 405 |
| 11 | 345 | 385 | 410 |
| 12 | 330 | 380 | 410 |

Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
## VARIANT 7

THEORETICAL PART:

1. The features of integrated logistics systems in air transport.

2. The corporate principle of partnership interaction of business entities of the air transportation chain.

PRACTICAL PART:

Build six deliveries of aviation spare parts used Inventory Control System (Fixed-Order Quantity System), when the Basic Data is:
- Demand 146 000 units per year;
- Fixed Order Cost is 20 000 UAH;
- Storage Cost is 4 UAH per day;
- Delivery Lead Time is 4 days;
- Delay Time of Delivery is 1 days per 1,4,5 deliveries.
- Period of Control is 365 days.

Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024

**EXAM TEST ON SUBJECT "AVIATION MANAGEMENT"**
**<u>VARIANT 8</u>**

THEORETICAL PART:

1. Importance and features of strategic planning in aviation management.


2. The leading role of the interests of consumers - customers of aviation services.


PRACTICAL PART:

According to the initial data given in Table 1, you should calculate the forecast of air freight data for the 4th year. Detail formulas for determining data smoothing, trend smoothing, seasonality estimates and forecast for period 17.

Table 1 – Air freight data

| Month | Year | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| 1 | 315 | 345 | 380 |
| 2 | 320 | 345 | 390 |
| 3 | 310 | 355 | 405 |
| 4 | 335 | 360 | 400 |
| 5 | 345 | 370 | 410 |
| 6 | 355 | 375 | 405 |
| 7 | 360 | 395 | 415 |
| 8 | 375 | 410 | 420 |
| 9 | 365 | 400 | 425 |
| 10 | 360 | 395 | 415 |
| 11 | 355 | 390 | 410 |
| 12 | 340 | 380 | 400 |

Acting Head of Logistics Department
_____ Svitlana SMERICHEVSKA
April 4, 2024