

American International University-Bangladesh (AIUB)

Accounting Assignment

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Sec. : F

**P 6.1**

1. The goods should not be recorded in the inventory as it was shipped with terms FOB shipping point . The Goods were sold on February 26.
2. The goods should be recorded because goods were shipped on February 26 and

purchased on term FOB shipping point.

1. Goods should be included in the inventory.
2. Goods should not be recorded because these are consigned goods.
3. As the goods were purchased on term FOB destination and Houghton didn't receive it before February 28 ,these goods should not be recorded in the inventory.
4. Goods should be recorded in the inventory as the buyer received it on March 2.
5. Damaged goods should not be recorded in the inventory.

**P6.2**

(a)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Glee Distribution** | | | |  |
|  |  |  |  |  |
| Date | Explanation | Units | Unit Cost | Total Cost |
| 1-Oct | Beg Inv | 2000 | 7 | 14000 |
| 3-Oct | Purchase | 2500 | 8 | 20000 |
| 9-Oct | Purchase | 3500 | 9 | 31500 |
| 19-Oct | Purchase | 3000 | 10 | 30000 |
| 25-Oct | Purchase | 4000 | 11 | 44000 |
|  |  | 15000 |  | 139500 |

|  |  |  |
| --- | --- | --- |
| Units available for sale |  | 15000 |
| Cost of goods available for sale | | 139500 |

(b)

|  |  |  |  |
| --- | --- | --- | --- |
| Sale |  | 10900 |  |
| Ending Inventory |  | 4100 |  |
|  |  |  |  |
| **FIFO** |  |  |  |
| Ending Inventory |  |  |  |
| Date | Units | Unit Cost | Total Cost |
| 25-Oct | 4000 | 11 | 44000 |
| 19-Oct | 100 | 10 | 1000 |
|  | 4100 |  | 45000 |
|  |  |  |  |
| COGS | 94500 |  |  |
|  |  |  |  |
| **LIFO** |  |  |  |
| Ending Inventory |  |  |  |
| Date | Units | Unit Cost | Total Cost |
| 1-Oct | 2000 | 7 | 14000 |
| 3-Oct | 2100 | 8 | 16800 |
|  | 4100 |  | 30800 |
|  |  |  |  |
| COGS | 108700 |  |  |
|  |  |  |  |
| **Avergae Cost** | |  |  |
| Avg Cost per Unit |  | 9.30 |  |
|  |  |  |  |
|  |  |  |  |
| End Inv | 38130.00 |  |  |
| COGS | 101370.00 |  |  |

(c)

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| --- | --- |
| 1 | FIFO shows the highest inventory amount for the balance sheet |
| 2 | LIFO shows the highest cost of goods sold for the income statement. |

**P6.5**

**(a)**

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| --- | --- | --- | --- | --- | --- |
|  | **Koeteriz Inc**. | | | |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Date | Explanation | Units | Unit Cost | Total Cost |  |
| 1-Jun | Beg Inv | 40 | 40 | 1600 |  |
| 4-Jun | Purchase | 135 | 43 | 5805 |  |
| 18-Jun | Purchase | 55 | 46 | 2530 |  |
| 18-Jun | Purchase Return | 10 | 46 | 460 |  |
| 28-Jun | Purchase | 35 | 50 | 1750 |  |
|  |  | 255 |  | 11225 |  |
| Units Available for Sale |  | 255 |  |  |  |
| Cost of Goods Available for Sale |  |  | 11225 |  |  |
|  |  |  |  |  | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Sales Revenue = (110\*70)-(15\*70)+(65\*76) | | | | | |  |  | =11590 |  |  | |
| Sale | (110-15)+65 | 160 |  |  |  |
| Ending Inventory |  | 95 |  |  |  |
|  |  |  |  |  |  |
| **FIFO** |  |  |  |  |  |
| Ending Inventory |  |  |  |  |  |
| Date | Units | Unit Cost | Total Cost |  |  |
| 28-Jun | 35 | 50 | 1750 |  |  |
| 18-Jun | 45 | 46 | 2070 |  |  |
| 4-Jun | 15 | 43 | 645 |  |  |
|  | 95 |  | 4465 |  |  |
|  |  |  |  |  |  |
| COGS | 6760 |  |  |  |  |
|  |  |  |  |  |  |
| Gross Profit | 11590-6760 |  |  |  |  |
|  | 4830 |  |  |  |  |
| Gross profit Rate | 41.67386 | % |  |  |  |
|  |  |  |  |  |  |
| **LIFO** |  |  |  |  |  |
| Ending Inventory |  |  |  |  |  |
| Date | Units | Unit Cost | Total Cost |  |  |
| 1-Jun | 40 | 40 | 1600 |  |  |
| 4-Jun | 55 | 43 | 2365 |  |  |
|  | 95 |  | 3965 |  |  |
|  |  |  |  |  |  |
| COGS | 7260 |  |  |  |  |
|  |  |  |  |  |  |
| Gross Profit | 11590-7260 |  |  |  |  |
|  | 4330 |  |  |  |  |
| Gross profit Rate | 37.35979 | % |  |  |  |
|  |  |  |  |  |  |
| **Average Cost** | |  |  |  |  |
| Avg Cost per Unit |  | 44.02 |  |  |  |
|  |  |  |  |  |  |
| End Inv | 4181.86 |  |  |  |  |
| COGS | 7043.14 |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Gross Profit | 11590-7043.14 |  |  |  |  |
|  | 4546.86 |  |  |  |  |
| Gross profit Rate | 39.23089 | % |  |  |  |

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| (b) |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| **>>>** | LIFO gives the highest Cost Of Goods Sold and lowest Gross Profit. | | | | | | | |
| **>>>** | In FIFO,it gives the highest Gross Profit. | | | | |  |  |  |
| **>>>** | Average Cost gives the second lowest Gross Profit and Cost Of Goods Sold | | | | | | | |
|  |  |  |  |  |  |  |  |  |

**P6.8**

**(a)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Dempsey Inc** | |  |  |  |  |
|  |  |  |  |  |  |  |
| **FIFO** |  |  |  |  |  |  |
| **Date** | **Purchase** | | **Cost of Goods Sold** | | **Balance** | |
| 1-Jun |  |  |  |  | [100@15](mailto:100@15) | 1500 |
| 5-Jan | [140@18](mailto:140@18) | 2520 |  |  | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [140@18](mailto:140@18) | 2520 |
|  |  |  |  |  |  | 4020 |
| 8-Jan |  |  | [100@15](mailto:100@15) | 1500 | [130@18](mailto:130@18) | 2340 |
|  |  |  | [10@18](mailto:10@18) | 180 |  |  |
|  |  |  |  | 1680 |  |  |
| 10-Jan |  |  | [10@18](mailto:10@18) | 180 | [140@18](mailto:140@18) | 2520 |
| 15-Jan | [55@20](mailto:55@20) | 1100 |  |  | [140@18](mailto:140@18) | 2520 |
|  |  |  |  |  | [55@20](mailto:55@20) | 1100 |
|  |  |  |  |  |  | 3620 |
| 16-Jan | [5@20](mailto:5@20) | 100 |  |  | [140@18](mailto:140@18) | 2520 |
|  |  |  |  |  | [50@20](mailto:50@20) | 1000 |
|  |  |  |  |  |  | 3520 |
| 20-Jan |  |  | [90@18](mailto:90@18) | 1620 | [50@18](mailto:50@18) | 900 |
|  |  |  |  |  | [50@20](mailto:50@20) | 1000 |
|  |  |  |  |  |  | 1900 |
| 25-Jan | [20@22](mailto:20@22) | 440 |  |  | [50@18](mailto:50@18) | 900 |
|  |  |  |  |  | [50@20](mailto:50@20) | 1000 |
|  |  |  |  |  | [20@22](mailto:20@22) | 440 |
|  | **210** | **3960** | **190** | **3120** | **120** | **2340** |
|  |  |  |  |  |  |  |
| Cost Of Good Available for Sale = 310 | | |  |  |  |  |
| COGS = 3120 |  |  |  |  |  |  |
| Ending Inventory = 2340 | |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Sales Revenue =(110\*28)-(10\*28)+(90\*32) | | |  |  |  |  |
| Sales Revenue = | 5680 |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Gross Profit | 2560 |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **LIFO** |  |  |  |  |  |  |
| **Date** | **Purchase** | | **Cost of Goods Sold** | | **Balance** | |
| 1-Jun |  |  |  |  | [100@15](mailto:100@15) | 1500 |
| 5-Jan | [140@18](mailto:140@18) | 2520 |  |  | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [140@18](mailto:140@18) | 2520 |
|  |  |  |  |  |  | 4020 |
| 8-Jan |  |  | [110@18](mailto:110@18) | 1980 | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [30@18](mailto:30@18) | 540 |
|  |  |  |  |  |  |  |
| 10-Jan |  |  | [10@18](mailto:10@18) | 180 | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [40@18](mailto:40@18) | 720 |
| 15-Jan | [55@20](mailto:55@20) | 1100 |  |  | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [40@18](mailto:40@18) | 720 |
|  |  |  |  |  | [55@20](mailto:55@20) | 1100 |
| 16-Jan | [5@20](mailto:5@20) | 100 |  |  | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [40@18](mailto:40@18) | 720 |
|  |  |  |  |  | [50@20](mailto:50@20) | 1000 |
| 20-Jan |  |  | [50@20](mailto:50@20) | 1000 | [100@15](mailto:100@15) | 1500 |
|  |  |  | [40@18](mailto:40@18) | 720 |  |  |
| 25-Jan | [20@22](mailto:20@22) | 440 |  |  | [100@15](mailto:100@15) | 1500 |
|  |  |  |  |  | [20@22](mailto:20@22) | 440 |
|  | **210** | **3960** | **190** | **3520** | **120** | **1940** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| COGS =3520 |  |  |  |  |  |  |
| Ending Inventory = 1940 | |  |  |  |  |  |
| Gross Profit = 5680-3520 | |  |  |  |  |  |
| Gross Profit=2160 |  |  |  |  |  |  |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Average Cost** | |  |  |  |  |  |
| **Date** | **Purchase** | | **Cost of Goods Sold** | | **Balance** | |
| 1-Jun |  |  |  |  | [100@15](mailto:100@15) | 1500 |
| 5-Jan | [140@18](mailto:140@18) | 2520 |  |  | [240@16.75](mailto:240@16.75) | 4020 |
| 8-Jan |  |  | [110@16.75](mailto:110@16.75) | 1842.5 | [130@16.75](mailto:130@16.75) | 2177.5 |
| 10-Jan |  |  | [10@16.75](mailto:10@16.75) | 167.5 | [140@16.75](mailto:140@16.75) | 2345 |
| 15-Jan | [55@20](mailto:55@20) | 1100 |  |  | [195@17.67](mailto:195@17.67) | 3445 |
| 16-Jan | [5@20](mailto:5@20) | 100 |  |  | [190@17.60](mailto:190@17.60) | 3344 |
| 20-Jan |  |  | [90@17.60](mailto:90@17.60) | 1584 | [100@17.60](mailto:100@17.60) | 1760 |
| 25-Jan | [20@22](mailto:20@22) | 440 |  |  | [120@18.33](mailto:120@18.33) | 2199.6 |
|  | **210** | **3960** | **190** | **3259** | **120** | **2199.6** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| COGS =3259 |  |  |  |  |  |  |
| Ending Inventory = 2199.6 | |  |  |  |  |  |
| Gross Profit = 5680-3259 | |  |  |  |  |  |
| Gross Profit=2421 |  |  |  |  |  |  |

**P6.9**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Wittmann Co.** | | |  |  |  |
| **(a)** |  |  |  |  |  |  |
| **FIFO** |  |  |  |  |  |  |
| Date | Purchase |  | COGS |  | Balance |  |
| 1-Jul | [5@122](mailto:5@122) | 610 |  |  | [5@122](mailto:5@122) | 610 |
| 6-Jul |  |  | [3@122](mailto:3@122) | 366 | [2@122](mailto:2@122) | 244 |
| 11-Jul | [7@136](mailto:7@136) | 952 |  |  | [2@122](mailto:2@122) | 244 |
|  |  |  |  |  | [7@136](mailto:7@136) | 952 |
|  |  |  |  |  |  | 1196 |
| 14-Jul |  |  | [2@122](mailto:2@122) | 244 | [4@136](mailto:4@136) | 544 |
|  |  |  | [3@136](mailto:3@136) | 408 |  |  |
| 21-Jul | [8@147](mailto:8@147) | 1176 |  |  | [4@136](mailto:4@136) | 544 |
|  |  |  |  |  | [8@147](mailto:8@147) | 1176 |
|  |  |  |  |  |  | 1720 |
| 27-Jul |  |  | [4@136](mailto:4@136) | 544 | [7@147](mailto:7@147) | 1029 |
|  |  |  | [1@147](mailto:1@147) | 147 |  |  |
|  | **20** | **2738** | **13** | **1709** | **7** | **1029** |
|  |  |  |  |  |  |  |
| Ending Inventory = 1029 | | |  |  |  |  |
|  |  |  |  |  |  |  |
| **LIFO** |  |  |  |  |  |  |
| Date | Purchase |  | COGS |  | Balance |  |
| 1-Jul | [5@122](mailto:5@122) | 610 |  |  | [5@122](mailto:5@122) | 610 |
| 6-Jul |  |  | [3@122](mailto:3@122) | 366 | [2@122](mailto:2@122) | 244 |
| 11-Jul | [7@136](mailto:7@136) | 952 |  |  | [2@122](mailto:2@122) | 244 |
|  |  |  |  |  | [7@136](mailto:7@136) | 952 |
|  |  |  |  |  |  | 1196 |
| 14-Jul |  |  | [5@136](mailto:5@136) | 680 | [2@122](mailto:2@122) | 244 |
|  |  |  |  |  | [2@136](mailto:2@136) | 272 |
|  |  |  |  |  |  | 516 |
| 21-Jul | [8@147](mailto:8@147) | 1176 |  |  | [2@122](mailto:2@122) | 244 |
|  |  |  |  |  | [2@136](mailto:2@136) | 272 |
|  |  |  |  |  | [8@147](mailto:8@147) | 1176 |
|  |  |  |  |  |  | 1692 |
| c |  |  | [5@147](mailto:5@147) | 735 | [2@122](mailto:2@122) | 244 |
|  |  |  |  |  | [2@136](mailto:2@136) | 272 |
|  |  |  |  |  | [3@147](mailto:3@147) | 441 |
|  | **20** | **2738** | **13** | **1046** | **7** | **957** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Ending Inventory = 957 | |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Average Cost** | |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Date | Purchase |  | COGS |  | Balnce |  |
| 1-Jul | [5@122](mailto:5@122) | 610 |  |  | [5@122](mailto:5@122) | 610 |
| 6-Jul |  |  | [3@122](mailto:3@122) | 366 | [2@122](mailto:2@122) | 244 |
| 11-Jul | [7@136](mailto:7@136) | 952 |  |  | [9@132.889](mailto:9@132.889) | 1196.001 |
| 14-Jul |  |  | [5@132.889](mailto:5@132.889) | 664.445 | [4@132.889](mailto:4@132.889) | 531.556 |
| 21-Jul | [8@147](mailto:8@147) | 1176 |  |  | [12@142.296](mailto:12@142.296) |  |
| 27-Jul |  |  | [5@142.296](mailto:5@142.296) | 711.48 | [7@142.296](mailto:7@142.296) | 996.072 |
|  | **20** | **2738** | **13** | **1741.925** | **7** | **996.072** |
|  |  |  |  |  |  |  |
| Ending Inventory = 996.072 | | |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **(b)** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| FIFO produces the highest Ending Inventory valuation | | | | | | | |

**E10.5**

**(a)**

|  |  |  |
| --- | --- | --- |
|  | **Yellow Bus Lines** | |
|  |  |  |
|  |  |  |
| Salvage Value = 8000 |  |  |
| Beginning Book Value = 148000 |  |  |
| useful Life = 4 |  |  |
|  |  |  |
| Depreciable Cost |  | 140000 |
| Total Units Of activity |  | 100000 |
| Depreciable Cost per unit |  | 1.4 |

**(b)**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Units of Activity |  | Depreciation Cost Per Unit |  |  | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Book Value |  |
| 2020 | 26000 | | 1.4 | | | 36400 | | | 36400 | | | 111600 | |
| 2021 | 32000 | | 1.4 | | | 44800 | | | 81200 | | | 66800 | |
| 2022 | 25000 | | 1.4 | | | 35000 | | | 116200 | | | 31800 | |
| 2023 | 17000 | | 1.4 | | | 23800 | | | 140000 | | | 8000 | |

**E10.6**

(a)

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Rotttino Company** | |  |
|  |  |  |  |
|  |  |  |  |
| Beginning Book Value |  | 150000 |  |
| Salvage Value |  | 12000 |  |
| Useful Life |  | 5 | years |
|  |  |  |  |
| Depreciable Cost |  | 138000 |  |
| Annual Depreciation Expense |  | 27600 |  |
|  |  |  |  |
| So, The depreciation Expense for 2020 is = |  |  | 6900 |
|  |  |  |  |

(b)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Depreciation cost per unit = | | 13.8 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Units of Activity | | Depreciation Cost Per Unit |  |  | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Book Value |  |
| 2020 | 1700 | | 13.8 | | | 23460 | | | 23460 | | | 126540 | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| So, The depreciation Expense for 2020 is = | | | 23460 |  |  |  |  |  |  |  |  |  |  |

(c)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Beginning Book Value | Rate | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Ending Book Value |  |
| 2020 | 150000 | 40% | 15000 | | | 15000 | | | 135000 | |
| 2021 | 135000 | 40% | 54000 | | | 69000 | | | 81000 | |

**E10.7**

(a)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Linton Company** | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Depreciable Cost = | | 32000 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Straight Line Method** | | |  |  |  |  |  |  |  |  |  |  |  |
| Year | Depreciable Cost | | Rate(%) | | | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Ending Book Value |  |
| 2020 | 32000 | | 12.5 | | | 4000 | | | 4000 | | | 30000 | |
| 2021 | 32000 | | 12.5 | | | 4000 | | | 8000 | | | 26000 | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Depreciable cost per unit= | | | 0.32 |  |  |  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Units Of Activity** | | |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Units of Activity |  | Depreciation Cost Per Unit |  |  | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Book Value |  |
| 2020 | 15000 | | 0.32 | | | 4800 | | | 4800 | | | 29200 | |
| 2021 | 12000 | | 0.32 | | | 3840 | | | 8640 | | | 25360 | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Double Declining Method** | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Beginning Book Value | | Rate | | | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Ending Book Value |  |
| 2020 | 34000 | | 25% | | | 8500 | | | 8500 | | | 25500 | |
| 2021 | 25500 | | 25% | | | 6375 | | | 14875 | | | 19125 | |

(b)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **1** | **Journal Entry** | |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Depreciation Expense …........................... | | | | 4000 |  |
|  |  | Accumulated Depreciation….............. | | | | | 4000 |
|  |  |  |  |  |  |  |  |
| **2** | **The Truck Would be reported:** | | | |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Equipment…......................................................... | | | | | 34000 |
|  |  | (-)Accumulated Depreciation…................................ | | | | | 4000 |
|  |  |  |  |  |  |  | 30000 |

**P10.2**

(a)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Avery Transportation** | | | |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bus 1:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Depreciable Cost | | 90000 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Depreciable Cost | | Rate(%) | | | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Ending Book Value |  |  |
| 2018 | 90000 | | 20% | | | 18000 | | | 18000 | | | 78000 | |  |
| 2019 | 90000 | | 20% | | | 18000 | | | 36000 | | | 60000 | |  |
| 2020 | 90000 | | 20% | | | 18000 | | | 54000 | | | 42000 | |  |
| 2021 | 90000 | | 20% | | | 18000 | | | 72000 | | | 24000 | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bus 2:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Beginning Book Value | | Rate | | | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Ending Book Value |  |  |
| 2018 | 110000 | | 50% | | | 55000 | | | 55000 | | | 55000 | |  |
| 2019 | 55000 | | 50% | | | 27500 | | | 82500 | | | 27500 | |  |
| 2020 | 27500 | | 50% | | | 13750 | | | 96250 | | | 13750 | |  |
| 2021 | 13750 | | 50% | | | 3750 | | | 100000 | | | 10000 | |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Bus 3:** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Depreciation Cost Per Unit = | | | 0.7 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Units of Activity | | Depreciation Cost Per Unit |  |  | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Book Value |  |  |
| 2018 | 24000 | | 0.7 | | | 16800 | | | 16800 | | | 75200 | |  |
| 2019 | 34000 | | 0.7 | | | 23800 | | | 40600 | | | 51400 | |  |
| 2020 | 30000 | | 0.7 | | | 21000 | | | 61600 | | | 30400 | |  |
| 2021 | 16000 | | 0.7 | | | 11200 | | | 72800 | | | 19200 | |  |

(b)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Depreciable Cost | Rate(%) | Annual Depreciation Expense |  |  | Accumulated Depreciation |  |  | Ending Book Value |  |
| 2018 | 90000 | 20% | 13500 | | | 13500 | | | 82500 | |
| 2019 | 90000 | 20% | 18000 | | | 31500 | | | 64500 | |

P10.4

(a)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Depreciation expense | | Accumulated Depreciation | |  |
| 2018 | 18000(1) | | 18000 | |  |
| 2019 | 18000 | | 36000 | |  |
| 2020 | 14400(2) | | 50400 | |  |
| 2021 | 14400 | | 64800 | |  |
| 2022 | 14400 | | 79200 | |  |
| 2023 | 17900(3) | | 97100 | |  |
| 2024 | 17900 | | 115000 | |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| **1** |  |  |  |  |  |
|  | Depreciable cost = |  | (120000-12000)/6 |  | 18000 |
|  |  |  |  |  |  |
| **2** |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Depreciable cost = |  | (84000-12000)/5 |  | 14400 |
|  |  |  |  |  |  |
| **3** |  |  |  |  |  |
|  | Depreciable cost = |  | (40800-5000)/2 |  | 17900 |

E19.4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **(a)** |  |  |  |  |  |
|  |  |  |  |  |  |
|  | Alkman Company | |  |  |  |
|  | Cost of Goods Manufactured | |  |  |  |
|  | For the month December 31,2020 | |  |  |  |
|  |  |  |  |  |  |
|  | Beginning WIP |  |  |  | 13,500 |
|  | Direct Materials |  |  |  |  |
|  | Beginning raw materials |  | 21,000 |  |  |
|  | RM purchase |  | 150,000 |  |  |
|  | RM available |  | 171,000 |  |  |
|  | (-)Ending RM |  | 30,000 |  |  |
|  | Direct Materials used |  |  | 141,000 |  |
|  | Direct Labor |  |  | 220,000 |  |
|  | MOH |  |  | 180,000 |  |
|  | Total manufacturing cost |  |  |  | 541,000 |
|  | Total cost of WIP |  |  |  | 554,500 |
|  | (-) Ending WIP |  |  |  | 17,200 |
|  | COGM |  |  |  | 537,300 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **(b)** |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  | Alkman Company | |  |  |
|  |  | Income Statement | |  |  |
|  |  | For the month Dec 31,2020 | |  |  |
|  |  |  |  |  |  |
|  |  | sales Revenue |  |  | 910,000 |
|  |  | (-) cost of goods sold |  |  |  |
|  |  | Beginning finished goods |  | 27,000 |  |
|  |  | COGM |  | 537,300 |  |
|  |  | Cost of goods available for sale |  | 564,300 |  |
|  |  | (-) Ending finished goods |  | 21,000 |  |
|  |  | COGS |  |  | 543,300 |
|  |  | Gross Profit |  |  | 366,700 |

**E19.6**

(a)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Robert Company | |  |  |  |
| Cost of Goods Manufactured | |  |  |  |
| For the month June 30,2020 | | |  |  |
|  |  |  |  |  |
| Beginning WIP |  |  |  | 5,000 |
| RM purchase |  | 54,000 |  |  |
| RM available |  | 63,000 |  |  |
| (-)Ending RM |  | 13,100 |  |  |
| Direct Materials used |  |  | 49,900 |  |
| Direct Labor |  |  | 47,000 |  |
| MOH |  |  | 19,900 |  |
| Total manufacturing cost |  |  |  | 116,800 |
| Total cost of WIP |  |  |  | 121,800 |
| (-) Ending WIP |  |  |  | 7000 |
| COGM |  |  |  | 114,800 |

(b)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Robert Company | |  |
|  | Balance Sheet | |  |
|  | June 30,2020 |  |  |
|  |  |  |  |
| Current Assets |  |  |  |
| Inventories |  |  |  |
| Ending Raw Material |  | 13100 |  |
| Ending WIP | | 7000 |  |
| Ending Finished Goods |  | 8000 |  |
| Total Inventories |  |  | 28100 |
| Total Current Assets |  |  | 28100 |

P19.2

(a)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Bell Company** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| For 1500 audio Systems | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| **Cost Item** | | **Direct Materials** | | **Direct Labour** | | **Manufacturing Overhead** | | | **Period Costs** | |
| Raw Material cost(74) per unit | | 111000 | |  | |  | | |  | |
| Worker cost (12)per hour | |  | | 90000 | |  | | |  | |
| Rent on equipment(4900)per month | |  | |  | | 4900 | | |  | |
| Indirect material(5)per system | |  | |  | | 7500 | | |  | |
| Supervisor salary(3000)per month | |  | |  | | 3000 | | |  | |
| Factory janitorial cost(1300)monthly | |  | |  | | 1300 | | |  | |
| Advertising cost(9500)per month | |  | |  | |  | | | 9500 | |
| Factory Building Depreciation Expense(7800)per year | |  | |  | | 650 | | |  | |
| Property Tax on factory (9000) per year | |  | |  | | 750 | | |  | |
| **Total** | | **111000** | | **90000** | | **18100** | | | **9500** | |

(b)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| According to (a), | |  |  |  |
|  |  |  |  |  |
|  | The total manufacturing cost for 1500 audio system is = | | 219100 |  |
|  |  |  |  |  |
|  | So, the cost to produce one audio system is = | (219100/1500) | 146.067 | (ans) |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Clarkson Company | |  |  |  |
|  | Cost of Goods Manufactured Schedule | | | |  |
|  | For the month ended June 30, 2020 | | |  |  |
|  |  |  |  |  |  |
| Beginning Work In Process |  |  |  |  | 19800 |
| Direct Materials | | |  |  |  |
| Beginning Raw Material |  |  | 48000 |  |  |
| (+) Purchase | | | 96400 |  |  |
| RM available for use | | | 144400 |  |  |
| (-) Ending Raw Material |  |  | 39600 |  |  |
| Direct Materials used |  |  |  | 104800 |  |
| Direct Labor | | |  | 139250 |  |
| Manufacturing Overhead |  |  |  |  |  |
| Indirect Labor | | | 24460 |  |  |
| Factory Insurance | | | 4600 |  |  |
| Factory Machineray Dep. |  |  | 16000 |  |  |
| Factory Utilities | | | 27600 |  |  |
| Plant Manager's Salary |  |  | 58000 |  |  |
| Factory Property Tax |  |  | 9600 |  |  |
| Factory Repairs | | | 1400 |  |  |
| Total Manufacturing Overhead |  |  |  | 141660 |  |
| Total Manufacturing Cost |  |  |  |  | 385710 |
| Total Cost of Work in Process |  |  |  |  | 405510 |
| (-) Ending Work in Process |  |  |  |  | 18600 |
| Cost of Goods Manufactured |  |  |  |  | 386910 |
|  |  |  |  |  |  |

P19.4

(a)

(b)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Clarkson Company | |  |  |
|  | Income Statement | |  |  |
|  | For the month ended June 30, 2020 | | |  |
|  |  |  |  |  |
| Sales Revenue | | | 534000 |  |
| (-) Sales Discounts | | | 4200 |  |
| Net Sales | | |  | 529800 |
| (-) Cost of Goods Sold | | |  |  |
| Beginning Finishing Goods |  |  | 96000 |  |
| (+) COGM | | | 386910 |  |
| Cost of Goods available for sale |  |  | 482910 |  |
| (-) Ending Finished Goods |  |  | 75900 |  |
| COGS | | |  | 407010 |
| Gross Profit | | |  | 122790 |

(c)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Clarkson Company | |  |
|  | Balance Sheet | |  |
|  | 30-Jun-20 |  |  |
|  |  |  |  |
| Assets | | | |
| Current Assets |  |  |  |
| Cash | |  | 32000 |
| Accounts Receivable | |  | 27000 |
| Inventories |  |  |  |
| Ending Raw Material |  | 39600 |  |
| Ending WIP | | 18600 |  |
| Ending Finished Goods |  | 75900 |  |
| Total Inventories |  |  | 134100 |
| Total Current Assets |  |  | 193100 |

P19.5

(a)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |
|  | Empire Company | |  |  |  |
|  | Cost of goods manufactured Schedule | | |  |  |
|  | For the month ended october 31,2020 | | |  |  |
|  |  |  |  |  |  |
|  | Beginning Work in process |  |  |  | 20,000 |
|  | Direct Materials | |  |  |  |
|  | Raw material,mar 1 |  | 18,000 |  |  |
|  | Materials Purchased |  | 264,000 |  |  |
|  | Total materials available for sale |  | 282,000 |  |  |
|  | Ending raw materials,mar 31 |  | 29,000 |  |  |
|  | Direct materials used |  |  | 253,000 |  |
|  | Direct Labor |  |  | 190,000 |  |
|  | Manufacturing overhead |  |  |  |  |
|  | Rent on factory facilities |  | 60,000 |  |  |
|  | Depreciation on factory equip |  | 31,000 |  |  |
|  | indirect labor cost |  | 28,000 |  |  |
|  | utilities expense |  | 9,000 |  |  |
|  | insurance expense |  | 4,800 |  |  |
|  | total MOH |  |  | 132,800 |  |
|  | Total manufacturing cost |  |  |  | 575,800 |
|  | Total cost of work in process |  |  |  | 595,800 |
|  | Ending WIP |  |  |  | 14,000 |
|  | COGM |  |  |  | 581,800 |

(b)

|  |  |  |  |
| --- | --- | --- | --- |
| Empire Company | |  |  |
| Income Statement | |  |  |
| For the month ended october 31,2020 | | |  |
|  |  |  |  |
| Sales Revenue |  |  | 780,000 |
| (-) Cost of goods sold |  |  |  |
| Beginning finished goods |  | 30,000 |  |
| (+) COGM |  | 581,000 |  |
| Cost of goods available for sale |  | 611,800 |  |
| (-) Ending finished goods |  | 50,000 |  |
| COGS |  |  | 561,800 |
| Gross Profit |  |  | 218,200 |
| (-) advertising exp. |  | 90,000 |  |
| (-) selling and administrative sal. |  | 75,000 |  |
| (-) Depreaciation on sales equip. |  | 45,000 |  |
| (-) Utilities exp. |  | 3,000 |  |
| (-) insurance exp. |  | 3,200 |  |
| Total period Cost |  |  | 216,200 |
| Net income |  |  | 2,000 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E22.8** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | **(a)** |  |  |  |  |  |  |  |
|  |  | Depreciation |  | 1400 |  |  |  |  |
|  |  | Advertising |  | 200 |  |  |  |  |
|  |  | Insurance | | 2000 |  |  |  |  |
|  |  | Fixed Cost | | 3600 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | Charge per lawn | | | 60 |  |  |  |
|  |  | Unit contribution Margin = | | | 36 | (60-12-10-2) | |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  | So , The break event point lawns= |  |  | 100 | (3600/36) | | (ans) |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | **(b)** |  |  |  |  |  |  |  |
|  |  | Break event point in dollar = | | |  | 100\*60 |  |  |
|  |  |  |  |  | Ans = | 600 |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E22.9** |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | **(a)** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Fixed Cost = | 5900+1100+1000+100 |  |  |  |  |
|  |  | SO, the fixed cost is = | 8100 | (per month) |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Variable cost = | 14+28 = | 42 | (per rented room) | | |
|  |  |  |  |  |  |  |  |
|  |  | Contribution Margin = | 60-42 = | 18 | (per room) | |  |
|  |  |  |  |  |  |  |  |
|  |  | So , the break event point = | 8100/18 = | 450 rooms |  | (Ans) |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | **(b)** |  |  |  |  |  |  |
|  |  | So, the break event point in dollar = | 450 \* 60 = | 27000 | (Ans) |  |  |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E22.10** | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | (a) |  |  |  |  |  |  |
|  |  | Average Price = | 120 |  |  |  |  |
|  |  | Variable Cost per unit= | 72 | (60%\*120) |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | So , the contribution margin per unit = |  | 48 | (120-72) | (ans) |  |
|  |  |  |  |  |  |  |  |
|  |  | So, the contribuion margin in dollar = |  | 48\*560 = | 26880 | (ans) |  |
|  |  |  |  |  |  |  |  |
|  |  | Contribution margin ratio = |  | 48/120 = | 0.4 | 40% | (ans) |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | (b) |  |  |  |  |  |  |
|  |  | Break event point in units = |  | 21024/48 | 438 | units | (ans) |
|  |  |  |  |  |  |  |  |
|  |  | Break event point in dollars = |  | 21024/40% | 52560 |  | (ans) |
|  |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **E22.11** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | (a) |  |  |  |  |  |  |  |  |  |
|  |  | Fixed costs = |  | (15700+1300+1000) |  | 18000 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | Contribution per passenger = |  |  | (27000/1500)= | 18 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | So , the break event point in number of passengers = |  |  |  |  | (18000/18) = | 1000 | passengers | (ans) |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | Now , the contribution margin ratio = |  |  |  | 0.75 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  | So , the break event point in dollars = |  |  |  | 24000 | (18000/0.75) | (ans) |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | (b) | At break event point profit is zero. So , the contribution will be equal to fixed cost . | | | | | | |  |  |
|  |  | Example : If fixed cost is 27000 the contribution margin at break event point would be 27000. | | | | | | | |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **E22.13** | |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | (a) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Unit contribution margin = |  |  | (400-280)= | 120 | (ans) |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | (b) |  |  |  |  |  |  |
|  |  | **CVP Income Statement** | | |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  | Per Unit | Total |  |  |
|  |  | Sales(600 unit) |  | 400 | 240000 |  |  |
|  | (-)Variable Cost | | | 280 | 168000 |  |  |
|  | Contribuition Margin | | | 120 | 72000 |  |  |
|  | (-)Fixed Costs | | | 90 | 54000 |  |  |
|  | **Net Income** | | | **30** | **18000** |  |  |
|  |  | | |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | (c) |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  | Break Event point in units = |  |  | (54000/12)= | 450 | (ans) |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | (d) |  |  |  |  |  |  |
|  |  | **CVP Income Statement** | | |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  | Per Unit | Total |  |
|  |  |  | Sales(450 unit) |  | 400 | 180000 |  |
|  |  | (-)Variable Cost | | | 280 | 126000 |  |
|  |  | Contribuition Margin | | | 120 | 54000 |  |
|  |  | (-)Fixed Costs | | | 120 | 54000 |  |
|  |  | **Net Income** | | | **0** | **0** |  |