**CHAPTER 9 – STRUCTURED QUESTIONS**

Frankie’s Auto Garage has the following purchases for December 20—

|  |  |  |  |
| --- | --- | --- | --- |
| **DATE** | **QUANTITY** | **UNIT PRICE** | **TOTAL** |
| Dec 1 | 40 | $50 | $2 000 |
|  |  |  |  |
| Dec 5 | 60 |  70 |  4 200 |
|  |  |  |  |
| Dec 18 | 20 |  40 |  800 |
|  |  |  |  |
| Dec 29 | 50 |  30 |  1 500 |
|  |  |  |  |
| Dec 30 | 15 |  60 |  900 |
|  |  |  |  |
|  |  |  | $9 400 |
|  |  |  |  |
|  |  |  |  |

Frankie’s Auto Garage unit selling price for each product was $200. The sales for the month of December were as follows:

|  |  |
| --- | --- |
| DATE | QUANTITY |
| Dec 7 | 70 |
|  |  |
| Dec 20 | 30 |
|  |  |
| Dec 31 | 70 |

(1) Using the FIFO method, calculate the value of closing stock as at December 31st.

(2) Using the LIFO method, calculate the value of closing stock as at December 31st

(3) Using the AVCO method, calculate the value of closing stock as at December 31st

(4)Prepare an income statement (in columnar) for each of the stock valuation methods showing the gross profit values

(3) Which of the three (3) stock valuation methods will give the highest gross profit value?

**CHAPTER 9 – ANSWERS**

1. FIFO

|  |  |  |  |
| --- | --- | --- | --- |
| **DATE** | **RECEIPTS** | **ISSUES** | **BALANCE** |
| Dec 1 | 40 @ $50 | - | 40@ $50 = $2 000 |
|  |  |  |  |
| Dec 5 | 60@ $70 | - | 40@ $50=$2 00060@ $70=$4 200100 $6 200 |
|  |  |  |  |
| Dec 7 |  | 40@$4060@$70100(70)30 | 30@$70=$2 100 |
|  |  |  |  |
| Dec 18 | 20@$40 |  | 30@$70=$2 10020@$40= $ 80050 $2 900 |
|  |  |  |  |
| Dec 20 |  | 30@$7020@$4050(30)20 | 20@$40=$800 |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Dec 29 | 50@$30 |  | 20@$40=$ 80050@$30=$1 50070 $2 300 |
|  |  |  |  |
| Dec 30 | 15 @ $60 |  | 20@$40=$ 80050@$30=$1 50015@$60=$ 90085 $3 200 |
|  |  |  |  |
| Dec 31 |  | 20@$4050@$3015@$6085(70)15 | 15@$60=$900 |
|  |  |  |  |

2.

LIFO

|  |  |  |  |
| --- | --- | --- | --- |
| **DATE** | **RECEIPTS** | **ISSUES** | **BALANCE** |
| Dec 1 | 40@$50 |  | 40@$50=$ 2 000 |
|  |  |  |  |
| Dec 5 | 60@$70 |  | 40@$50=$2 00060@$70=$4 200100 $6 200 |
|  |  |  |  |
| Dec 7 |  | 70 | 30@$50=$1 500 |
|  |  |  |  |
| Dec 18 | 20@$40 |  | 30@$50=$1 50020@$40=$ 80050 $2 300 |
|  |  |  |  |
| Dec 20 |  | 30 | 20@$50=$1 000 |
|  |  |  |  |
| Dec 29 | 50@$30 |  | 20@$50=$1 00050@$30=$1 50070 $2 500 |
|  |  |  |  |
| Dec 30 | 15@$60 |  | 20@$50=$1 00050@$30=$1 50015@$60=$ 90085 $3 400 |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Dec 31 |  | 70 | 15@$50=$750 |
|  |  |  |  |
|  |  |  |  |

3.

AVCO

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| DATE | RECEIPTS | ISSUES | AVERAGE COST | BALANCE |
| Dec 1 | 40@$50 |  | $2000/40=$50 | 40@$50=$2 000 |
|  |  |  |  |  |
| Dec 5 | 60@$70 |  | $6 200/100=$62 | 40@$50=$2 00060@$70=$4 200100 $6 200 |
|  |  |  |  |  |
| Dec 7  |  | 70@$62 | $1 860/30=$62 | 100 $6 200(70) @$62=(4 340)30 $ 1 860 |
|  |  |  |  |  |
| Dec 18 | 20@$40 |  | $2 660/50=$53.20 | 30 $1 86020@$40= $ 80050 $2 660 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Dec 20 |  | 30@$53.20 | $1064/20=$53.20 | 50 $2 66030@$53.20=(1596)20 $1064  |
|  |  |  |  |  |
| Dec 29 | 50@$30 |  | $2 564/70=$36.62 | 20 $1 06450@$30=$1 50070 $2564 |
|  |  |  |  |  |
| Dec 30 | 15@$60 |  | $3 464/85=$40.75 | 70 $2 56415@$60= 90085 $3 464 |
|  |  |  |  |  |
| Dec 31 |  | 70@$40.75 | $611.294/15=$40.75 | 85 $3 464(70) (2 852.41)15 $611.294 |
|  |  |  |  |  |

4.

Frankie’s Auto Garage

Income Statement

For the month of December

|  |  |  |  |
| --- | --- | --- | --- |
|  | FIFO | LIFO | AVCO |
| Sales |  $34 000 |  $34 000 |  $34 000 |
|  |  |  |  |
| Purchases  | 9 400 | 9 400 | 9 400 |
|  |  |  |  |
| Closing stock | ( 900) | (750) | (611.29) |
|  |  |  |  |
| Cost of goods sold |  (8 500) |  ( 8 650)  |  (8788.71) |
|  |  |  |  |
| GROSS PROFIT |  $25 500  |  $25 350  |  $25211.29 |

5.

FIFO

**CHAPTER 10 – STRUCTURED QUESTIONS**

1.

Match the ratios in List A with the formulas in List B

|  |  |
| --- | --- |
| **LIST A** | **LIST B** |
| 1. Stock turnover | a) current assets/current liabilities |
|  |  |
| 2. Current ratio | b) debtors/credit sales x 365 |
|  |  |
| 3. Acid test ratio | c)creditors/credit purchases x 365 |
|  |  |
| 4. Debtors turnover | d)net profit/capital employed x 100 |
|  |  |
| 5. Creditors turnover | e)current assets – closing stock/current liabilities |
|  |  |
| 6. Gross margin | f)net profit/net sales x 100 |
|  |  |
| 7. Gross mark up | g)cost of goods sold/average stock |
|  |  |
| 8.Net profit | h)gross profit/cost of sales x 100  |
|  |  |
| 9.Return on capital employed (ROCE) | i)gross profit/net sales x 100 |
|  |  |

2.

Identify two (2) types of ratios which measure profitability and liquidity of a business?

The financial statements prepared below is for Kenny Music Store

Kenny Music Store

Income Statement

Sales 100 000

Opening stock 10 000

Purchases 40 000

Closing stock (10 000)

Cost of goods sold (40 000)

Gross profit 60 000

Less operating expenses:

Salaries 30 000

Telephone 1 000

Electricity 1 000

 (32 000)

NET PROFIT 28 000

Kenny Music Store

Balance Sheet

Fixed Assets

Recording equipment (net) 200 000

Current assets

Stock 10 000

Debtors 10 000

Bank 30 000

 50 000

Less Current liabilities

Creditors (5 000)

 45 000

 245 000

Financed by

Capital at start 207 000

Add net profit 28 000

Less drawings (10 000)

 245 000

Using the information given in above financial statements you are required to do the following:

3.

Calculate the net profit percentage (**show all workings**)

4.

Calculate the acid test ratio (**show all workings**)

5.

(a)

Calculate stock turnover time/year (**show all workings**)

(b)

Using the information in (a) above calculate stock turn in days (show all workings)

**CHAPTER 10 – ANSWERS**

1.

|  |  |
| --- | --- |
| **LIST A** | **LIST B** |
| 1. Stock turnover | G |
|  |  |
| 2. Current ratio | A |
|  |  |
| 3.Acid test ratio | E |
|  |  |
| 4.Debtors turnover | B |
|  |  |
| 5.Creditors turnover | C |
|  |  |
| 6.Gross margin | I |
|  |  |
| 7.Gross mark up | H |
|  |  |
| 8. Net profit | F |
|  |  |
| 9. Return on Capital employed (ROCE) | D |
|  |  |

Profitability:

Gross margin

Gross mark up

Net profit

ROCE

Liquidity:

Current ratio

Acid test ratio

3.

Net profit/net sales x 100=28 000/100 000 x 100=28%

4.

Current assets – closing stock/current liabilities=50 000 – 10 000/5 000=8:1

5.

(a)

Cost of goods sold/average stock=cost of goods sold/opening stock + closing stock/2

=40 000/10 000 +10 000/2=4 times per year

(b)

Days/stock turn=365/4=91.3days approx