

4. INSURANCE CLAIMS FOR LOSS OF STOCK AND LOSS OF PROFIT

ASSIGNMENT SOLUTIONS

PROBLEM NO: 1

Computation of claim for loss of stock

Stock on the date of fire i.e. on 30th March, 20X2 (W.N.1)	62,600
Less: Value of salvaged stock	(12,300)
Loss of stock	<u>50,300</u>
Amount of claim = $\frac{\text{Insured Value}}{\text{Total cost of stock on the date of fire}} \times \text{Loss of stock}$	48,211 (approx.)
$= \left[\frac{60,000}{62,600} \times 50,300 \right]$	

A claim of Rs.48,211 (approx.) should be lodged by M/s Suraj Brothers to the insurance company.

Working Notes:

1. Calculation of closing stock as on 30th March, 2012

Memorandum Trading Account for (from 1st January, 20X2 to 30th March, 20X2)

Particulars	Amount(Rs.)	Particulars	Amount(Rs.)
To Opening stock	95,600	By Sales (W.N.3)	2,42,000
To Purchases (1,70,000-30,000)	1,40,000	By Goods with customers (for approval) (W.N.2)	26,400*
To Wages (50,000 – 3,000)	47,000	By Closing stock (Bal. fig.)	62,600
To Gross profit (20% on sales)	48,400		
	<u>3,31,000</u>		<u>3,31,000</u>

* For financial statement purposes, this would form part of closing stock (since there is no sale). However, this has been shown separately for computation of claim for loss of stock since the goods were physically not with the concern and, hence, there was no loss of such stock.

2. Calculation of goods with customers

Since no approval for sale has been received for the goods of Rs.33,000 (i.e. 2/3 of Rs.49,500) hence, these should be valued at cost i.e. Rs.33,000 – 20% of Rs.33,000 = Rs.26,400.

3. Calculation of actual sales

Total sales – Sale of goods on approval (2/3rd) = Rs.2,75,000 – Rs.33,000 = Rs.2,42,000.

PROBLEM NO: 2

Computation of claim for loss of stock:

Particulars	Amount (Rs.)	Amount (Rs.)
Opening Stock on 1-1-20X2		83,500
Add: Purchases during the period		1,12,000
		<u>1,95,500</u>
Less: Sales during the period	1,54,000	
Gross Profit thereon	46,200	
		(1,07,800)
		<u>87,700</u>

Less: Stock Salvaged	11,200	
Agreed value of damage Stock	10,500	(21,700)
		66,000
Amount of claim = $\frac{\text{Rs. } 60,000}{\text{Rs. } 87,700} \times \text{Rs. } 66,000 = \text{Rs. } 45,154$		

PROBLEM NO.3Memorandum Trading Account for the period 1st April, 2012 to 29th August 2012

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Opening Stock	7,90,100	By Sales	45,36,000
To Purchases 33,10,700		By Closing stock (Bal. fig.)	8,82,600
Less: Advertisement (41,000)			
Drawings (2,000)	32,67,700		
To Gross Profit [30% of Sales - Refer Working Note]	13,60,800		
	<u>54,18,600</u>		<u>54,18,600</u>

Statement of Insurance Claim

Particulars	Amount (Rs.)
Value of stock destroyed by fire	8,82,600
Less: Salvaged Stock	(1,08,000)
Add: Fire Fighting Expenses	4,700
Insurance Claim	<u>7,79,300</u>

Note: Since policy amount is more than claim amount, average clause will not apply. Therefore, claim amount of Rs.7,79,300 will be admitted by the Insurance Company.

Working Note:

Dr. Trading Account for the year ended 31st March, 2012 Cr.

Particulars	Amount	Particulars	Amount
To Opening Stock	7,10,500	By Sales	80,00,000
To Purchases	56,79,600	By Closing stock	7,90,100
To Gross Profit	24,00,000		
	<u>87,90,100</u>		<u>87,90,100</u>

Rate of Gross Profit in 2011-12: $\frac{\text{Grossprofit}}{\text{Sales}} \times 100 = \frac{24,00,000}{80,00,000} \times 100 = 30\%$

PROBLEM NO.4

Memorandum Trading A/c (01-04-2009 to 20-10-2009)

Particulars	Amount	Particulars	Amount
To Opening stock (Refer W.N)	2,40,000	By Sales (Rs. 6,20,000 - Rs.80,000)	5,40,000
To Purchases (Rs.2,80,000 + Rs. 40,000)	3,20,000	By closing stock (bal. fig)	1,55,000
To Gross profit (Rs. 5,40,000 x 25%*)	1,35,000		
	<u>6,95,000</u>		<u>6,95,000</u>

Particulars	Amount
Stock on the date of fire (i.e. on 20.10.2009)	1,55,000
Less: Stock salvaged	(31,000)
Stock destroyed by fire	1,24,000

$$\text{Insurance claim} = \frac{\text{Loss of stock}}{\text{Value of stock on the date of fire}} \times \text{Amount of policy}$$

$$= \frac{1,24,000}{1,55,000} \times 1,00,000 = \text{Rs. } 80,000$$

Working Note: Stock as on 1st April, 2009 was valued at 10% lower than cost. Hence, original cost of the stock as on 1st April, 2009 would be = $\frac{2,16,000}{90} \times 100 = \text{Rs. } 2,40,000$

*It is assumed that gross profit is provided as a percentage of sales.

PROBLEM NO: 5

In the books of Agni Ltd.

Dr.		Trading Account for the year ended 31-03-10		Cr.	
Particulars	Amount (Rs.)	Particulars	Amount (Rs.)		
To opening stock	9,62,200	By sales A/c	52,00,000		
To purchases A/c	45,25,000	By closing stock	13,27,200		
To gross profit (bal. fig)	10,40,000				
	65,27,200				65,27,200

$$\text{GP\%} = \frac{\text{Gross profit}}{\text{sales}} \times 100 = \frac{10,40,000}{52,00,000} \times 100 = 20\%$$

Memorandum Trading Account from 01-04-10 to 22-01-11

Particulars	Rs.	Rs.	Particulars	Rs.	Rs.
To opening stock		13,27,200	By sales A/c	49,17,000	
To purchases A/c	34,82,700		Add: Unrecorded misappropriated cash sales	40,000	49,57,000
Less: Advertisement	(1,00,000)		By closing stock (b/f)		7,44,100
		33,82,700			
To Gross profit (49,57,000 x 20%)		9,91,400			
		57,01,100			57,01,100

Estimated stock in hand on the date of fire = Rs.7,44,100.

Working Note: Cash sales defalcated by the Accountant:

Defalcation period = 01.04.2010 to 18.08.2010 = 140 days

Since, 140 days / 7 weeks = 20 weeks

Therefore, amount of defalcation = 20 weeks × Rs.2,000 = Rs.40,000.

PROBLEM NO: 6

Statement showing valuation of stock on 31-03-12

Particulars	Amount (Rs.)	Amount (Rs.)
Stock on 01-04-11	28,500	
Less: Book Value of abnormal stock [10,000 - 3,500]	(6,500)	22,000
Add: Purchases		1,52,500
Add: Manufacturing expenses		30,000
		2,04,500
Less: Cost of sales:		
Sales as per books	2,49,000	
Less: Sale of abnormal item	(9,000)	
	2,40,000	
Less: Gross profit @ 20%	(48,000)	(1,92,000)
Value of stock as on 31-3-2012		12,500

ALTERNATIVELY:Dr. **Trading Account for the year ended 31-03-2012** Cr.

Particulars	Normal item	Abnormal item	Total	Particulars	Normal item	Abnormal item	Total
To opening stock [28,500 + 3,500]	22,000	10,000	32,000	By sales A/c	2,40,000	9,000	2,49,000
To Purchases A/c	1,52,500	-	1,52,500	By abnormal loss A/c	-	1,000	1,000
To Manufacturing Exp A/c	30,000	-	30,000	By closing stock (Bal. Fig)	12,500	-	12,500
To G.P (20% of 2,40,000)	48,000	-	48,000				
	2,52,500	10,000	2,62,500		2,52,500	10,000	2,62,500

∴ Value of stock on 31-03-12 = Rs.12,500

PROBLEM NO: 7Dr. **Trading Account of Shri Ramesh for 20X1 (to determine the rate of gross profit)** Cr.

Particulars	Amount	Particulars	Amount	Amount
To Opening Stock	73,500	By Sales A/c		4,87,000
To Purchases	3,98,000	By Closing Stock: As valued	79,600	
To Gross Profit (b.f.)	97,400	Add: Amount written off to restore stock to full cost	2,300	81,900
	5,68,900			5,68,900

The (normal) rate of gross profit to sales is = $\frac{97,400}{4,87,000} \times 100 = 20\%$ **Memorandum Trading Account upto March 31, 20X2**

	Normal loss	Abnormal loss	Total		Normal loss	Abnormal loss	Total
To Opening Stock	75,000	6,900*	81,900	By Sales	2,28,000	3,200	2,31,200
To Purchases	1,62,000		1,62,000	By Loss		250	250
To Gross Profit (Rs. 2,28,000 x 20%)	45,600		45,600	By Closing Stock (bal. fig.)	54,600	3,450**	58,050
	2,82,600	6,900	2,89,500		2,82,600	6,900	2,89,500

* at cost, book value is Rs.4,600

** Book value will also be restored for remaining unsold abnormal stock since the remainder of this stock was now estimated to be worth its original cost.

Calculation of Insurance Claim:

Value of Stock on March 31, 20X2 58,050

Less: Salvage (5,800)

Loss of stock 52,250

Claim subject to average clause: $\frac{\text{Amount of policy}}{\text{Value of stock}} \times \text{Actual loss of stock} = \frac{5,00,000}{58,050} \times 52,250 = 45,004$ **PROBLEM NO: 8**Dr. **Memorandum Trading A/c for the Period 1st April 2017 to 27th July 2017** Cr.

Particulars	Normal item	Abnormal item	Total	Particulars	Normal item	Abnormal item	Total
To Opening stock (W.N.5)	60,000	4,000	64,000	By Sales (W.N. 3)	4,00,000	2,300	4,02,300
To Purchases (W.N. 1)	2,80,000	-	2,80,000	By Loss	-	700	700
To Wages (W.N. 4)	50,000	-	50,000	By Goods On Approval (W.N. 2)	8,000	-	8,000

To Gross profit @ 20%	80,000	-	80,000	By Closing stock (Bal. fig.)	62,000	1,000	63,000
	4,70,000	4,000	4,74,000		4,70,000	4,000	4,74,000

Statement of Claim for Loss of Stock

Particulars	Amount (Rs.)
Book value of stock as on 27th July, 2017	62,000
Add: Abnormal Stock	1,000
Less: Stock salvaged-	(5,000)
Loss of stock	58,000
Add: Fire fighting expenses	1,300
Total Loss	59,300

Amount of claim to be lodged with insurance company:

$$= \text{Loss} \times \frac{\text{Policy Value}}{\text{Value of Stock on the date of fire}} = \text{Rs. } 59,300 \times \frac{55,000}{63,000} = \text{Rs. } 51,770$$

Working Notes:

1. Calculation of Adjusted Purchases:

Particulars	Amount (Rs.)
Purchases	2,92,000
Less: Purchase of Machinery	(10,000)
Less: Free samples	(2,000)
Adjusted purchases	2,80,000

2. Calculation of Goods with Customers

Approval for sale has not been received = Rs. 40,000 × ¼ = Rs. 10,000

Hence, these should be valued at cost i.e. (Rs. 10,000 - 20% of Rs. 10,000) = Rs. 8000

3. Calculation of Actual Sales:

	Amount (Rs.)
Total Sales	4,12,300
Less: Approval for sale not received (40,000 × 1/4)	(10,000)
Actual Sales	4,02,300

4. Calculation of Wages

	Amount (Rs.)
Total Wages	53,000
Less: Wages for installation of machinery	(3,000)
	50,000

5. Value of Opening Stock:

Original cost of stock as on 31st March, 2018 = 63,000 + 1,000 (Amount written off) = 64,000.

PROBLEM NO: 9

COMPUTATION OF SUM INSURED UNDER VARIOUS CASES

Particulars	(a) Rs.	(b) Rs.	(c) Rs.	(d) Rs.	(e) Rs.	(f) Rs.
A. Turnover	44.00	44.00	44.00	44.00	44.00	44.00
B. Less: Variable Costs	36.08	36.08	36.08	39.688	32.472	32.472
C. Gross Profit (A-B)	7.92	7.92	7.92	4.312	11.528	11.528
D. Add: Increase in Insured Standing Charges	-	-	0.48	-	-	0.24
E. Less: Uninsured Standing Charges	-	(2.40)	-	-	-	(2.40)
F. Sum Insurable(C+D-E)	7.92	5.52	8.40	4.312	11.528	9.368

PROBLEM NO: 10**Step 1:** computation of GP%

Net profit for last year = 70,000

Add: Insured standing charges of last year = 56,000

Adjusted Net profit = 1,26,000

$$\text{GP\%} = \frac{\text{Adjusted net profit}}{\text{Last year sales}} \times 100 = \frac{1,26,000}{4,20,000} \times 100 = 30\%$$

Step 2: Short Sales

Standard Turnover [01-2-13 To 30-06-13] = 2,00,000

Add: 15% upward trend in turnover = 30,000

Adjusted Standard Turnover = 2,30,000

Add: Actual Turnover [01-02-14 to 30-06-14] = (80,000)

Short sales = 1,50,000

Step 3 : Loss of profit = Short sales x GP% = LOP

1,50,000 x 30% = 45,000

Step 4: Computation of Adjusted annual turnover

Annual Turnover [01-02-13 to 31-01-14] = 4,50,000

Add: 15% Upward trend = 67,500

AAT = 5,17,500

Step 5: Gross profit on adjusted annual turnover = AAT x GP% = GP on AAT

5,17,500 x 30% = 1,55,250

Step 6: Admissible Additional Expenses:

a) Actual Additional Expenses = 6,700

b) Proportionate additional Expenses = $\frac{\text{Additional Exp} \times \text{GP on AAT}}{\text{GP on AAT} + \text{uninsured standing charges}} = \frac{6,700 \times 1,55,250}{1,55,250 + 8,000} = 6,372$

c) GP on Sales Generated by additional expenses: Not Available

Admissible Additional Expenses: **Lower of the above** = Rs. 6,372

Step 7: Gross Claim:

Loss of profit = 45,000

Add: Admissible Additional Expenses = 6,372

Less: Savings in standing charges = 2,450

= 48,922

Step 8: Computation of Net claim:

$$\text{Claim} = \frac{\text{Gross claim}}{\text{GP on AAT}} \times \text{Policy Amount} = \frac{48,922}{1,55,250} \times 1,25,000 = \text{Rs. } 39,390$$

Note 1: GP on AAT i.e., 1,55,250 is more than Policy amount i.e., 1,25,000, so it is a case of under-insurance, hence average clause is applicable.

Note 2: Indemnity period is 6 months but disorganisation period is only 5 months therefore, insurer considers, disorganisation period as indemnity period.

PROBLEM NO: 11**1. Gross profit ratio**

Net profit in year 2017	56,000
<u>Add: Insured Standing charges</u>	<u>49,600</u>
Gross profit in year 2017	1,05,600
Ratio of Gross profit =	$\frac{1,05,600}{5,28,000} = 20\%$

2. Calculation of Short Sales

Indemnity period: 16.3.18 to 15.6.18

Standard Sales to be calculated on basis of corresponding period of year 2017

Sales for period 16.3.17 to 31.3.17	28,000
Sales for period 1.4.17 to 15.6.17(Note 1)	<u>76,000</u>
Sales for period 16.3.17 to 15.6.17	1,04,000
<u>Add: Upward trend in Sales(10%) (Note 2)</u>	<u>10,400</u>
Standard Sales(adjusted)	<u>1,14,400</u>

Actual Sales for disorganized period

Calculation of Sales from 16.3.18 to 15.6.18:

Sales for period 16.3.18 to 30.3.18	NIL
Sales for period 1.4.18 to 15.6.18(40,000 – 6,000)	<u>34,000</u>
Actual Sales	<u>34,000</u>
Short Sales (1,14,400 – 34,000) =	80,400

3. Loss of gross profit

Short sales x gross profit ratio = $80,400 \times 20\%$ = 16,080

4. Application of average clause

$$\text{Net claim} = \text{Gross claim} \times \frac{\text{policy value}}{\text{gross profit on annual turnover}}$$

$$= 16,080 \times \frac{80,000}{1,19,480(\text{Note 3})}$$

Amount of claim = Rs.10,767.

Working Notes**1. Sales for period 1.4.17 to 15.6.17**

Sales for 1.4.17 to 30.6.17(given)	1,00,000
Sales for 16.6.17 to 30.6.17(given)	<u>(24,000)</u>
Sales for period 1.4.17 to 15.6.17	<u>76,000</u>

2. Calculation of upward trend in sales

Total sales in year 2015 = Rs.4,36,000

Increase in sales in year 2016 as compared to 2015 (4,80,000 – 4,36,000) = Rs.44,000

% increase = $\frac{44,000}{4,36,000} = 10\%$

Increase in sales in year 2017 as compared to 2016 (5,28,000 – 4,80,000) = Rs.48,000

$$\% \text{ increase} = \frac{48,000}{4,80,000} = 10\%$$

The annual percentage increase trend is of 10%

3. Gross profit on Annual Turnover

Sales from 16.3.17 to 30.3.17(adjusted) (28,000 x 1.10)	30,800
1.4.17 to 30.6.17 (adjusted) (1,00,000 x 1.10)	1,10,000
1.7.17 to 30.9.17(adjusted) (1,20,000 x 1.10)	1,32,000
1.1.18 to 15.3.18 (1,42,000 – Nil)	<u>1,42,000</u>
Sales for 12 months just before date of fire	<u>5,97,400</u>
Gross profit on adjusted annual sales @ 20%	1,19,480.

PROBLEM NO: 12

Calculation of loss of stock:

Dr. Trading A/c of Sony Ltd. For the period 1.1.2011 to 31.03.2011 Cr.

Particulars	Amount (Rs.)	Particulars	Amount (Rs.)
To Opening Stock	90,000	By sales	2,50,000
To Purchases	3,00,000	By closing Stock (bal. fig)	2,60,000
To Manufacturing Expenses	70,000		
To Gross Profit (20% of Rs. 2,50,000) (W.N.3)	<u>50,000</u>		
	<u>5,10,000</u>		<u>5,10,000</u>
			Amount (Rs.)
Stock destroyed by fire			2,60,000
Amount of fire policy			3,00,000

*G.P. of 2011 25%

Less: decrease in trend 5%
20%

As the value of stock destroyed by fire is less than the policy value, the entire claim will be admitted.

Calculation of loss of profit:

Calculation of short sales:

Particulars	Amount (Rs.)
Average sales for the period 01.04.2011 to 30.06.2011 (W.N.1) (Rs. 7,82,610/3)	2,60,870
Add: increasing trend of sales (15%) (Approx.)	<u>39,130</u>
	3,00,000
Less: sales during the period 01.04.2011 to 30.06.2011	<u>87,500</u>
Short sales	<u>2,12,500</u>

Computation of G.P. Ratio:

$$\text{Gross profit Ratio} = \frac{\text{Netprofit} + \text{Insured standing Charges}}{\text{Sales}} \times 100$$

$$= \frac{\text{Rs.}50,000 + \text{Rs.}50,000}{\text{Rs.}10,00,000} \times 100 = 10\%$$

Less: Decreasing trend in G.P. = 5%
5%

Loss of profit = 5% of Rs. 2,12,500 = Rs.10,625.

Amount allowable in respect of additional expenses:

Least of the following:

- i) Actual expenditure Rs.60,000
- ii) G.P. on sales generated by additional expenses (5% of Rs. 87,500) Rs. 4,375
(assumed that entire sales during disturbed period is due to additional expenses)

iii) Additional expenses $\times \frac{\text{G.P. on annual turnover}}{\text{G.P. on annual turnover} + \text{uninsured standing charges}}$

$$= \text{Rs. } 60,000 \times \frac{57,500}{57,500 + 1,30,000} = \text{Rs. } 18,400 \text{ (approx)}$$

Least i.e. Rs.4,375 is admissible.

G.P. on annual turnover: Adjusted annual turnover:

Particulars	Amount (Rs.)
Average turnover for the period 01.04.2010 to 31.12.2010 (W.N.1)	7,82,610
Turnover for the period 01.01.2011 to 31.03.2011	2,50,000
	10,32,610
Add: Increase in trend (15% of Rs.7,82,610) (W.N.2)	1,17,390
	11,50,000
Gross profit on annual turnover (5% of Rs.11,50,000)	57,500

As the gross profit on annual turnover (Rs. 57,500) is less than policy value (Rs. 1,00,000), average clause is not applicable.

Insurance claim to be submitted:

Particulars	Amount (Rs.)
Loss of stock	2,60,000
Loss of profit	10,625
Additional expenses	4,375
	2,75,000

Note: According to the given information standing charges include administrative expenses (Rs. 80,000) and finance charges (Rs. 1,00,000). Insured standing charges being Rs. 50,000, uninsured standing charges would be Rs. 1,30,000.

Working note 1:

Particulars	Amount (Rs.)
Break up of sales for the year 2010:	
Sales of the first quarter of 2010 (Rs. 2,50,000 x 100/115)	2,17,390* (approx.)
Sales for the remaining three quarters of 2010 Rs. (10,00,000-2,17,390)	7,82,610

* Sales for the first quarter of 2010 is computed on the basis of sales of the first quarter of 2011.

Working note 2: The increase in trend of sales has been applied to the sales of 2010 only, as the sales figure of the first quarter of 2011 was already trend adjusted.

Working Note 3: G.P. of 2010 = $(2,50,000/10,00,000) \times 100 = 25\%$

In 2011, gross profit had declined by 5% due to increased cost, hence, the rate of gross profit for Loss of stock is taken at 20%.

THE END