

### 3. INSURANCE CLAIMS FOR LOSS OF STOCK AND LOSS OF PROFIT

#### ASSIGNMENT SOLUTIONS

##### PROBLEM NO: 1

Computation of claim for loss of stock:

Particulars	Amount (Rs.)	Amount (Rs.)
Opening Stock on 1-1-20X2		83,500
<b>Add:</b> Purchases during the period		1,12,000
		1,95,500
<b>Less:</b> Sales during the period	1,54,000	
Gross Profit thereon	46,200	
		(1,07,800)
		87,700
<b>Less:</b> 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: 2

Statement showing valuation of stock on 31-03-12

Particulars	Amount (Rs.)	Amount (Rs.)
Stock on 01-04-11	28,500	
<b>Less:</b> Book Value of abnormal stock [10,000 - 3,500]	(6,500)	22,000
<b>Add:</b> Purchases		1,52,500
<b>Add:</b> Manufacturing expenses		30,000
		2,04,500
<b>Less:</b> Cost of sales:		
Sales as per books	2,49,000	
<b>Less:</b> Sale of abnormal item	(9,000)	
	2,40,000	
<b>Less:</b> 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: 3**

Dr. 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: 4**Dr. Memorandum Trading A/c for the Period 1<sup>st</sup> April 2017 to 27<sup>th</sup> 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)	8000	-	8000
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
<b>Less:</b> Purchase of Machinery	(10,000)
<b>Less:</b> 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 x  $\frac{1}{4}$  = 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
<b>Less:</b> Approval for sale not received (40,000 x $\frac{1}{4}$ )	(10,000)
Actual Sales	4,02,300

**4. Calculation of Wages**

**Amount (Rs.)**

Total Wages	53,000
<b>Less:</b> Wages for installation of machinery	(3,000)
	50,000

**5. Value of Opening Stock:**

Original cost of stock as on 31st March, 2012 = 63,000 + 1,000 (Amount written off) = 64,000.

**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		<b>Add:</b> Unrecorded misappropriated cash sales	40,000	49,57,000
<b>Less:</b> Advertisement	(1,00,000)	33,82,700	By closing stock (b/f)		7,44,100
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****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 × GP% = LOP1,50,000 × 30% = 45,000**Step 4:** Computation of Adjusted annual turnoverAnnual Turnover [01-02-13 to 31-01-14] = 4,50,000**Add:** 15% Upward trend = 67,500AAT = 5,17,500**Step 5:** Gross profit on adjusted annual turnover = AAT × GP% = GP on AAT5,17,500 × 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 AvailableAdmissible 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.7****1. Short sales**

Period	Adjusted Standard Turnover	Actual Turnover	Shortage
January	1,00,000	-	1,00,000
Feb. to October	9,60,000	8,00,000	1,60,000
	10,60,000	8,00,000	2,60,000

**2. Gross profit ratio for the purpose of insurance claim on loss of profit**

Gross profit - Insured Standing Charges - Uninsured standing charges = Net profit

Or

Gross profit - Uninsured standing charges = Net profit + Insured Standing Charges

$$= 4,06,400 - 20,000 = 3,86,400$$

$$\text{Gross Profit Ratio} = 3,86,400 / 12,70,000 \times 100 = 30.425\%$$

**3. Amount allowable in respect of additional expenses**

Least of the following:

i) Actual expenses = 1,80,000

ii) Gross profit on sales during 10 months period = 8,00,000 x 30.425% = 2,43,400

iii)  $\frac{\text{Gross Profit on Annual Adjusted Turnover}}{\text{Gross Profit on Annual Adjusted Turnover} + \text{uninsured Standing charges}} \times \text{Additional expenses}$

$$3,86,400 / 3,86,400 + 20,000 \times 1,80,000 = 1,71,142 \text{ (approx.)}$$

Least i.e. = Rs.1,71,142 is admissible.

**4. Amount of Claim:**

Gross profit on short sales = Rs.2,60,000 x 30.425/100	79,105
<b>Add:</b> Amount allowable in respect of additional expense	1,71,142
	2,50,247
<b>Less:</b> Savings in Insured Standing Charges	(28,000)
	2,22,247

On the amount of final claim, the average clause will not apply since the amount of the policy Rs.4,00,000 is higher than gross profit on annual adjusted turnover Rs.3,86,400. Therefore, insurance claim will be Rs 2,22,247.

**PROBLEM NO: 8****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)	50,000		
	5,10,000		5,10,000
			<b>Amount (Rs.)</b>
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
<b>Add:</b> increasing trend of sales (15%) (Approx.)	<u>39,130</u>
	3,00,000
<b>Less:</b> 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:**

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

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

$$\text{Less: Decreasing trend in G.P.} = \frac{5\%}{5\%}$$

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. 60,000) Rs. 4,375  
(assumed that entire sales during disturbed period is due to additional expenses)
- iii) Additional expenses x  $\frac{\text{G.P. on annual turnover}}{\text{G.P. on annual Turnover} + \text{Uninsured standing charges}}$   
 $= \text{Rs.60,000} \times \frac{57,500}{57,500 + 1,30,000} = \text{Rs.18,400 (approx.)}$

Least of the above 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	<u>2,50,000</u>
	10,32,610
<b>Add:</b> Increase in trend (15% of Rs.7,82,610) (W.N.2)	<u>1,17,390</u>
	<u>11,50,000</u>
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	<u>4,375</u>
	<u>2,75,000</u>

**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%.

**PROBLEM NO: 9**

In the books of M/s. Platinum Jewellers

Insurance policy to be taken

Particulars	Amount (Rs.)	Amount (Rs.)
Turnover of previous year		30,50,000
<b>Add:</b> Increase in sales by 25%		7,62,500
Sales for Current Year		38,12,500
<b>Less:</b> Cost of materials (18,60,000 + 25% increase)		(23,25,000)
		<b>14,87,500</b>
<b>Less:</b> Wages of Skilled Craftsmen (1,60,000 + 20% increase)		(1,92,000)
Gross Profit for Current Year		12,95,500
<b>Add:</b> Increased standing charges:		
Interest on overdraft (2,00,000 x 12%)	24,000	
Salaries (2,80,000 x 10%)	28,000	52,000
<b>Policy to be taken for current year 2015</b>		<b>13,47,500</b>

**WORKING NOTE: Calculation of Sales**

Dr. Trading and Profit and Loss account for the year ended 31.12.2014 Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To Cost of material A/c	18,60,000	By Sales (Balancing figure) A/c	30,50,000
To Wages of skilled craftsman A/c	1,60,000	By Interest Income A/c	44,000
To Salaries A/c	2,80,000		
To Audit Fees A/c	40,000		
To Rent A/c	64,000		
To Bank Charges A/c	18,000		
To Net Profit	6,72,000		
	<b>30,94,000</b>		<b>30,94,000</b>

**PROBLEM NO: 10**

Memorandum Trading Account for the Period from 1.1.2018 to 30.6.2018

	Rs.		Rs.
To Opening Stock (1.1.2018)	1,50,000	By Sales	11,50,000
To Purchases	9,50,000	Less: Sales Returns	(40,000)
	9,37,500		11,10,000

Less: Returns	(12,500)			
To Cartage Inwards		17,500	By Closing Stock	2,80,000
To Wages		7,500	(Bal. Fig.)	
To Gross Profit		2,77,500		
(25% of Rs. 11,10,000)				
		13,90,000		13,90,000

**Stock Destroyed Account**

	Rs.		Rs.
To Trading Account	2,80,000	By Stock Salvaged Account	20,000
		By Balance c/d (For Claim)	2,60,000
	2,80,000		2,80,000

**Statement of Claim**

Items	Cost	Depreciation	Salvage	Claim
(Rs.)	(Rs.)	(Rs.)	(Rs.)	
A	B	C	D	(E=B-C-D)
Stock	2,80,000	20,000	2,60,000	
Buildings	3,75,000	1,25,000 + 9,375	4,000	2,36,625
Equipment	75,000	22,500 + 5,625	2,500	44,375
				5,41,000

**SOLUTIONS FOR SELF PRACTICE****PROBLEM NO.1****Claim for loss of stock****Memorandum Trading Account for the period 1st January to 1st May, 2015**

To Opening stock To	70,000	By Sales	2,40,000
Purchases	1,00,000		
To Wages	50,000	By Closing stock (Balancing figure)	83,200
To Manufacturing expenses	36,000		
To Gross Profit @ 28% on sales	67,200		
(W.N.1)			
	<u>3,23,200</u>		<u>3,23,200</u>

Claim for loss of Stock will be limited to Rs.80,000 which is the amount of Insurance policy.

**Working Notes:****Rate of Gross Profit in 2014**

$$= \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

$$\frac{2,40,000}{8,00,000} \times 100 = 30\%$$

In 2015, Gross Profit had declined by 2% as a result of rise in wages, hence the rate of Gross Profit for loss of stock is taken at 28%.



Loss of Profit

**(a) Short Sales:**

Particulars	Amount (Rs.)
Sales from 1st May, 2014 to 31st August, 2014	3,60,000
Less: 20% decline observed in 2015 over 2014 (20% x 3,60,000) (Jan - April Rs.2,40,000 instead of Rs.3,00,000)	72,000
	2,88,000
Less: Sales from 1st May, 2015 to 31st August, 2015	60,000
Short-Sales	2,28,000
<b>(b) Gross profit ratio</b> {[Net profit + Insured standing charges (2014)] / Sales (2014)} x 100	$\frac{56,000 + 1,20,000}{8,00,000} \times 100 = 22\%$
Less: Expected decrease due to increase in wages	2%
	20%
<b>(c) Loss of Gross Profit:</b> 20% on short sales Rs.2,28,000	45,600
<b>(d) Annual turnover (adjusted):</b> (12 months to 1st May, 2015, i.e., 1 May 2014 to 30 Apr 2015)	
Sales for Jan-Dec., 2014	8,00,000
Less: From 1-1-2014 to 30-4-2014	(3,00,000)
	5,00,000
Less: 20% downward trend	(1,00,000)
	4,00,000
Add: From 1-1-2015 to 30-4-2015	2,40,000
	6,40,000
Gross Profit on annual turnover @ 20%	1,28,000
<b>(e) Amount allowable in respect of additional expenses</b>	
Least of the following:	
(i) Actual expenses	1,40,000
(ii) Gross Profit on sales during indemnity period 20% of ` 60,000	12,000
(iii) $\frac{\text{Gross profit on annual (adjusted) turnover}}{\text{Gross profit as above}} \times \text{Uninsured charges}$	$\frac{1,28,000}{1,48,000} \times 1,40,000 = 1,21,081$

Least i.e. Rs.12,000 is admissible

Total claim for Loss of Profit: 45,600 + 12,000=Rs.57,600

**Note.:** On the amount of final claim, the average clause will not apply since the amount of the policy ` Rs.1,72,000 is higher than Gross Profit on annual turnover Rs.1,28,000.

**PROBLEM NO.2****Computation of loss of profit for insurance claim****(1) Rate of gross profit**

$$\frac{\text{Net profit for the last financial year} + \text{Insured standing charges}}{\text{Turnover for the last financial year}} \times 100$$

$$\frac{1,20,000 + 2,40,000}{20,00,000} \times 100 = 18\%$$

Add: Adjustment for increase in gross profit rate = 2%

- 20%

**(2) Calculation of short sales**

Particulars	Amount (Rs.)
Turnover from 1.9.2009 to 1.3.2010	7,50,000
Add: Adjustment for increase in turnover @ 10%	75,000
Adjusted turnover	8,25,000
Less: Actual turnover from 1.9.2010 to 1.3.2011	2,25,000
Short sales	6,00,000

**(3) Additional expenses:**

Particulars	Amount (Rs.)
(i) Actual expenses	40,000
(ii) Gross profit on sale generated by additional expenses [(20/100) x Rs. 1,00,000]	20,000

(iii)

$$\frac{\text{Gross profit on annual adjusted turnover}}{\text{Gross profit on annual adjusted turnover} + \text{Uninsured standing charges}} \times \text{Additional expenses}$$

$$= \frac{20\% \text{ on Rs. } 24,20,000}{20\% \text{ on Rs. } 24,20,000 + 20,000} \times 40,000$$

$$= \frac{\text{Rs. } 4,84,000}{\text{Rs. } 5,04,000} \times 40,000 = \text{Rs. } 38,413$$

Least of the above three figures i.e. Rs.20,000 is allowable

$$* \text{ Rs. } 22,00,000 \times (110/100)$$

**(4) Amount of claim before application of average clause**

Particulars	Amount (Rs.)
Gross profit on short sales (20% on ` 6,00,000)	1,20,000
Add: Allowable additional expenses	20,000
	1,40,000
Less: Saving in insured standing charges	(15,000)
	1,25,000

**(5) Application of average clause**

Particulars	Amount (Rs.)
Annual turnover i.e. turnover from 1.9.2009 to 31.8 2010	22,00,000
Add: Adjustment for increase in turnover (10% of ` 22,00,000)	2,20,000
	24,20,000
Gross profit on annual adjusted turnover (20% on Rs. 24,20,000)	4,84,000
Loss of profit policy value	3,63,000

Since the policy-value is less than gross profit on adjusted annual turnover, the average clause is applicable

$$\text{Hence the amount of claim} = \text{Rs. } 1,25,000 \times (\text{Rs. } 3,63,000 / \text{Rs. } 4,84,000) = \text{Rs. } 93,750$$

**THE END**

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