

INSURANCE CLAIMS FOR LOSS OF STOCK AND LOSS OF PROFIT

BASIC CONCEPTS

A. 1. Claim for Loss of Stock

Claim for loss of stock can be studied under two heads:

a. Total Loss:

Amount of claim = Actual loss (If goods are fully insured but the amount of claim is restricted to the policy amount).

b. Partial Loss:

I) Without Average clause:-

Claim = Lower of actual Loss or Sum Insured

II) With Average Clause:-

Claim = Loss of stock x sum insured / Insurable amount (Total Cost)

B. 2. Claim for Loss of Profit

The Loss of Profit Policy normally covers the following items:

- (1) Loss of net profit
- (2) Standing charges.
- (3) Any increased cost of working

Gross Profit:

Net profit + Insured Standing charges OR

Insured Standing charges – Net Trading Loss (If any) X Insured Standing charges/All standing charges of business

Net Profit: The net trading profit (exclusive of all capital) receipts and accretion and all outlay properly (chargeable to capital) resulting from the business of the Insured at the premises after due provision has been made for all standing and other charges including depreciation.

Insured Standing Charges: Interest on Debentures, Mortgage Loans and Bank Overdrafts, Rent, Rates and Taxes (other than taxes which form part of net profit) Salaries of Permanent Staff and Wages to Skilled Employees, Boarding and Lodging of resident Directors and/or Manager, Directors' Fees, Unspecified Standing Charges [not exceeding 5% (five per cent) of the amount recoverable in respect of Specified Standing Charges].

Rate of Gross Profit: The rate of Gross Profit earned on turnover during the financial year immediately before the date of damage.

Annual Turnover: The turnover during the twelve months immediately before the damage.

Standard Turnover: The turnover during that period in the twelve months immediately before the date of damage which corresponds with the Indemnity Period.

Indemnity Period: The period beginning with the occurrence of the damage and ending not later than twelve months.

The insurance for Loss of Profit is limited to loss of gross profit due to

- (i) reduction in turnover, and
- (ii) increase in the cost of working.

Question 1

Significance of 'Average Clause' in a fire insurance policy.

(November, 2001)

Answer

In order to discourage under-insurance, fire insurance policies often include an average clause. The effect of these clause is that if the insured value of the subject matter concerned is less than the total cost then the average clause will apply, that is, the loss will be limited to that proportion of the loss as the insured value bears to the total cost.

The actual claim amount would therefore be determined by the following formula:

$$\text{Claim} = \frac{\text{Insured value}}{\text{Total cost}} \times \text{Loss suffered}$$

For example, if stock worth Rs. 4 lakhs is insured for Rs. 3 lakhs only and the loss incurred due to fire amounts to Rs. 1,80,000, the claim admitted by the insurer will be Rs. $1,80,000 \times \frac{3,00,000}{4,00,000} = \text{Rs. } 1,35,000$.

The average clause applies only when the insured value is less than the total value of the insured subject matter.

Question 2

X Ltd. has insured itself under a loss of profit policy for Rs. 3,63,000. The indemnity period under the policy is six months. On 1st September, 2010 a fire occurred in the factory of X Ltd. and the normal business was affected upto 1st March, 2011.

The following information is compiled for the year ended on 31st March, 2010:

	Rs.
Sales	20,00,000
Insured standing charges	2,40,000
Uninsured standing charges	20,000
Net profit	1,20,000

Following further details of turnover are furnished.

- Turnover during the period of 12 months ending on the date of fire was 22,00,000.
- Turnover during the period of interruption was Rs. 2,25,000.
- Actual turnover during the period from 1.9.2009 to 1.3.2010 during the preceding year corresponding to the indemnity period was Rs. 7,50,000.

X Ltd. spent an amount of Rs. 40,000 as additional cost of working during the indemnity period. On account of this additional expenditure:

- There was a saving of Rs. 15,000 in insured standing charges during the period of indemnity.
- Reduced turnover avoided was Rs. 1,00,000. i.e. but for his expenditure, the turnover after the date of fire would have been only Rs. 1,25,000.

A special clause in the policy stipulates that owing to the reasons acceptable to the insurer under the special circumstances the following increases are to be made:

- Increase of turnover standard and actual by 10%.
- Increase in rate of gross profit by 2% from previous year's level.

X Ltd. asks you to compute the claim for loss of profit. All calculations should be to the nearest rupee. **(May, 1999)**

Answer

Computation of loss of profit for insurance claim

(1) Rate of gross profit

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

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

Add: Adjustment for increase in gross profit rate = 2%
20%

(2) Calculation of short sales:

	Rs.
Turnover from 1.9.2009 to 1.3.2010	7,50,000
<i>Add:</i> Adjustment for increase in turnover	<u>75,000</u>
Adjusted turnover	8,25,000
<i>Less:</i> Actual turnover from 1.9.2010 to 1.3.2011	<u>2,25,000</u>
Short sales	<u>6,00,000</u>

(3) Additional expenses:

	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) Additional expenses × $\frac{\text{Gross profit on annual adjusted turnover}}{\text{Gross profit on annual adjusted turnover} + \text{Uninsured standing charges}}$	
= Rs. 40,000 × $\frac{20\% \text{ on Rs. } 24,20,000^*}{(20\% \text{ on Rs. } 24,20,000) + \text{Rs. } 20,000}$	
= Rs. 40,000 × $\frac{\text{Rs. } 4,84,000}{\text{Rs. } 5,04,000}$ = Rs. 38,413	

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

* Rs. 22,00,000 x (110/100)

(4) Amount of claim before application of average clause

	Rs.
Gross profit on short sales (20% on Rs. 6,00,000)	1,20,000
<i>Add:</i> Allowable additional expenses	<u>20,000</u>
	1,40,000
<i>Less:</i> Saving in insured standing charges	<u>15,000</u>
	<u>1,25,000</u>

(5) Application of average clause

	Rs.
Annual turnover i.e. turnover from 1.9.2009 to 31.8 2010	22,00,000
<i>Add:</i> Adjustment for increase in turnover (10% of Rs. 22,00,000)	<u>2,20,000</u>
	<u>24,20,000</u>
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.

Hence the amount of claim =Rs. 1,25,000x (Rs. 3,63,000/Rs. 4,84,000)
=Rs. 93,750

Question 3

CCL wants to take up a loss of profit policy. Turnover during the current year is expected to increase by 20%. The company will avail overdraft facilities from its bank @ 15% interest to boost up the sales. The average daily overdraft balance will be around Rs. 3 lakh. All other fixed expenses will remain same. The following further details are also available from the previous year's account.

	Rs.
<i>Total variable expenses</i>	<i>24,00,000</i>
<i>Fixed expenses:</i>	
<i>Salaries</i>	<i>3,30,000</i>
<i>Rent, Rates, and Taxes</i>	<i>30,000</i>
<i>Travelling expenses</i>	<i>50,000</i>
<i>Postage, Telegram, Telephone</i>	<i>60,000</i>
<i>Director's fees</i>	<i>10,000</i>
<i>Audit fees</i>	<i>20,000</i>
<i>Miscellaneous income</i>	<i>70,000</i>
<i>Net Profit</i>	<i>4,20,000</i>

Determine the amount of policy to be taken for the current year.

(November, 2001)

Answer

Insurance Policy

	Rs.
Gross profit on the basis of last year's sales	8,50,000
Add: 20% for increase of turnover	<u>1,70,000</u>
	10,20,000
Add: Increased standing charges (interest on overdraft)	<u>45,000</u>
Policy to be taken for current year	<u>10,65,000</u>

Working Notes:

1. Profit and Loss Account for the previous year

	Rs.		Rs.
To Variable expenses	24,00,000	By Sales	32,50,000
To Fixed expenses	5,00,000	By Misc. income	70,000
To Net profit	<u>4,20,000</u>		<u> </u>
	<u>33,20,000</u>		<u>33,20,000</u>

2. Gross profit of the previous year

	Rs.
Sales	32,50,000
Less: Variable expenses	<u>24,00,000</u>
	<u>8,50,000</u>

Question 4

Mr. A prepares accounts on 30th September each year, but on 31st December, 2011 fire destroyed the greater part of his stock. Following information was collected from his book:

	Rs.
Stock as on 1.10.2011	29,700
Purchases from 1.10.2011 to 31.12.2011	75,000
Wages from 1.10.2011 to 31.12.2011	33,000
Sales from 1.10.2011 to 31.12.2011	1,40,000

The rate of gross profit is 33.33% on cost. Stock to the value of Rs. 3,000 was salvaged. Insurance policy was for Rs. 25,000 and claim was subject to average clause.

Additional informations:

- (i) *Stock in the beginning was calculated at 10% less than cost.*
- (ii) *A plant was installed by firm's own worker. He was paid Rs. 500, which was included in wages.*
- (iii) *Purchases include the purchase of the plant for Rs. 5,000*

You are required to calculate the claim for the loss of stock.

(November, 2002)

Answer

Computation of claim for loss of stock:

	Rs.
Stock on the date of fire i.e. 31.12.2011 (Refer working note)	30,500
Less: Salvaged stock	<u>3,000</u>
Loss of stock	<u>27,500</u>
Amount of claim	

$$= \frac{\text{Insured value}}{\text{Total cost of stock on the date of fire}} \times \text{loss of stock}$$

$$= \frac{\text{Rs.25,000}}{\text{Rs. 30,500}} \times \text{Rs.27,500} = 22,541$$

Working Note:

Memorandum trading account can be prepared for the period from 1.10.2011 to 31.12.2011 to compute the value of stock on 31.12.2011.

Memorandum Trading Account
for period from 1.10.2011 to 31.12.2011

	Rs.	Rs.		Rs.
To Opening stock (Rs. 29,700x100/90)		33,000	By Sales	1,40,000
To Purchases	75,000		By Closing stock (balancing figure)	30,500
Less: Cost of plant	<u>5,000</u>	70,000		
To Wages	33,000			
Less: Wages paid for plant	<u>500</u>	32,500		
To Gross profit (33.33% on cost or 25% on sales)		35,000		
		<u>1,70,500</u>		<u>1,70,500</u>

Question 5

On account of a fire on 15th June, 2011 in the business house of a company, the working remained disturbed upto 15th December 2011 as a result of which it was not possible to affect any sales. The company had taken out an insurance policy with an average clause against consequential losses for Rs. 1,40,000 and a period of 7 months has been agreed upon as indemnity period. An increased of 25% was marked in the current year's sales as compared to the last year. The company incurred an additional expenditure of Rs. 12,000 to make sales possible and made a saving of Rs. 2,000 in the insured standing charges.

	Rs.	
Actual sales from 15 th June, 2011 to 15 th Dec, 2011	70,000	
Sales from 15 th June 2010 to 15 th Dec 2010	2,40,000	
Net profit for last financial year	80,000	
Insured standing charges for the last financial year	70,000	
Total standing charges for the last financial year	1,20,000	
Turnover for the last financial year	6,00,000	
Turnover for one year : 16 June 2010 to 15 June 2011	5,60,000	(November, 2003)

Answer

(1) Calculation of short sales:

	Rs.	
Sales for the period 15.6.2010 to 15.12.2010	2,40,000	
Add: 25% increase in sales	<u>60,000</u>	
Estimated sales in current year	3,00,000	
Less: Actual sales from 15.6.2011 to 15.12.2011	<u>70,000</u>	
Short sales	<u>2,30,000</u>	

(2) Calculation of gross profit:

$$\begin{aligned}
 \text{Gross profit} &= \frac{\text{Net profit} + \text{Insured standing charges}}{\text{Turnover}} \times 100 \\
 &= \frac{\text{Rs. } 80,000 + \text{Rs. } 70,000}{\text{Rs. } 6,00,000} \times 100 \\
 &= \frac{\text{Rs. } 1,50,000}{\text{Rs. } 6,00,000} \times 100 \\
 &= 25\%
 \end{aligned}$$

(3) Calculation of loss of profit:

$$\text{Rs. } 2,30,000 \times 25\% = \text{Rs. } 57,500$$

(4) Calculation of claim for increased cost of working :

Least of the following:-

(i) Actual expense =Rs. 12,000

(ii) Expenditure x (Net profit+ Insured standing charges)/(Net profit + Total standing charges)

$$= \text{Rs. } 12,000 \times \frac{\text{Rs. } 80,000 + \text{Rs. } 70,000}{\text{Rs. } 80,000 + \text{Rs. } 1,20,000} = \text{Rs. } 9,000$$

(iii) Gross profit on sales generated due to additional expenses

$$= \text{Rs. } 70,000 \times 25\% = \text{Rs. } 17,500$$

Rs. 9,000 being the least, shall be the increased cost of working.

(5) Calculation of total loss of profit:

	Rs.
Loss of profit	57,500
<i>Add:</i> Increased cost of working	<u>9,000</u>
	66,500
<i>Less:</i> Saving in standing charges	<u>2,000</u>
	<u>64,500</u>

(6) Calculation of insurable amount = Adjusted sales x G. P. rate:

	Rs.
Turnover from 16.6.2010 to 15.6.2011	5,60,000
<i>Add:</i> 25% increase	<u>1,40,000</u>
Adjusted sales	<u>7,00,000</u>
Insurable amount= Rs. 7,00,000 x 25% =	Rs. 1,75,000

(7) Total claim for consequential loss of profit:

$$\text{Total claim} = \frac{\text{Insured amount}}{\text{Insurable amount}} \times \text{Total loss of profit}$$

$$\text{Total claim} = \frac{\text{Rs. } 1,40,000}{\text{Rs. } 1,75,000} \times \text{Rs. } 64,500 = \text{Rs. } 51,600$$

Alternatively claim for increased cost of working can also be calculated applying the following method (first three calculations will be the same as in the earlier alternative).

(8) Calculation of claim for increased cost of working:

Least of the following :-

(i) Actual expense= Rs. 12,000

(ii) Expenditure x $\frac{\text{Gross profit on adjusted turnover}}{\text{Gross profit as above + Uninsured standing charges}}$

$$\text{Rs. } 12,000 \times \frac{(25/100) \times \text{Rs. } 7,00,000}{[(25/100) \times \text{Rs. } 7,00,000] + \text{Rs. } 50,000} = \text{Rs. } 9,333 \text{ approx.}$$

Where,

Adjusted turnover	Rs.
Turnover from 16.06.2010 to 15.06.2011	5,60,000
<i>Add:</i> 25% increase	<u>1,40,000</u>
	<u>7,00,000</u>

(iii) Gross profit on sales generated due to additional expenditure =25% x Rs. 70,000
= Rs. 17,500.

Rs. 9,333 being the least, shall be the increased cost of working.

(9) Calculation of total loss of profit

	Rs.
Loss of profit	57,500
<i>Add:</i> Increased cost of working	<u>9,333</u>
	66,833
<i>Less:</i> Saving in insured standing charges	<u>2,000</u>
	<u>64,833</u>

(10) Calculation of insurable amount:

Adjusted turnover x G.P. rate.

$$= \text{Rs. } 7,00,000 \times 25\% = \text{Rs. } 1,75,000$$

(11) Total claim for consequential loss of profit:

$$= \frac{\text{Insured amount}}{\text{Insurable amount}} \times \text{Total loss of profit}$$

$$= \frac{\text{Rs. } 1,40,000}{\text{Rs. } 1,75,000} \times \text{Rs. } 64,833 = \text{Rs. } 51,866.40$$

Question 6

On 20th October, 2009, the godown and business premises of Aman Ltd. were affected by fire. From the salvaged accounting records, the following information is available.

	₹
Stock of goods @ 10% lower than cost as on 31 st March, 09	2,16,000
Purchases less returns (1.4.09 to 20.10.09)	2,80,000
Sales less returns (1.4.09 to 20.10.09)	6,20,000

Additional information:

- (1) Sales upto 20th October, 09 includes ₹ 80,000 for which goods had not been dispatched.
- (2) Purchases upto 20th October, 09 did not include ₹ 40,000 for which purchase invoices had not been received from suppliers, though goods have been received in Godown.
- (3) Past records show the gross profit rate of 25%.
- (4) The value of goods salvaged from fire ₹ 31,000.
- (5) Aman Ltd. has insured their stock for ₹ 1,00,000.

Compute the amount of claim to be lodged to the insurance company. (November, 2010)

Answer

Memorandum Trading A/c
(1.4.09 to 20.10.09)

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

	₹
Stock on the date of fire (i.e. on 20.10.2009)	1,55,000
Less: Stock salvaged	<u>(31,000)</u>
Stock destroyed by fire	<u>1,24,000</u>

$$\begin{aligned} \text{Insurance claim} &= \frac{\text{Loss of stock}}{\text{Value of stock on the date of fire}} \times \text{Amount of policy} \\ &= \frac{1,24,000}{1,55,000} \times 1,00,000 = ₹ 80,000 \end{aligned}$$

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

$$= \frac{2,16,000}{90} \times 100 = ₹ 2,40,000$$

EXERCISES

1. Sony Ltd.'s trading and profit and loss account for the year ended 31st December, 2010 were as follows:

Trading and Profit and Loss Account for the year ended 31.12.2010

	Rs.		Rs.
Opening stock	20,000	Sales	10,00,000
Purchases	6,50,000	Closing stock	90,000
Manufacturing expenses	1,70,000		
Gross profit	<u>2,50,000</u>		_____
	<u>10,90,000</u>		<u>10,90,000</u>
Administrative expenses	80,000	Gross profit	2,50,000
Selling expenses	20,000		
Finance charges	1,00,000		
Net profit	<u>50,000</u>		_____
	<u>2,50,000</u>		<u>2,50,000</u>

The company had taken out a fire policy for Rs. 3,00,000 and a loss of profits policy for Rs. 1,00,000 having an indemnity period of 6 months. A fire occurred on 1.4.2011 at the premises and the entire stock were gutted with nil salvage value. The net quarter sales i.e. 1.4.2011 to 30.6.2011 was severely affected. The following are the other information:

Sales during the period	1.1.2011 to 31.3.2011	2,50,000
Purchases during the period	1.1.2011 to 31.3.2011	3,00,000
Manufacturing expenses	1.1.2011 to 31.3.2011	70,000
Sales during the period	1.4.2011 to 30.6.2011	87,500
Standing charges insured		50,000
Actual expense incurred after fire		60,000

The general trend of the industry shows an increase of sales by 15% and decrease in GP by 5% due to increased cost.

Ascertain the claim for stock and loss of profit.

(Hints: Stock destroyed by fire Rs. 2,60,000; and loss of profit rs.15,000)

2. On 30th June, 2011, accidental fire destroyed a major part of the stocks in the godown of Jay associates. Stocks costing Rs. 30,000 could be salvaged but not their stores ledgers. A fire insurance policy was in force under which the sum insured was Rs. 3,50,000. From available records, the following information was retrieved:
- (1) Total of sales invoices during the period April-June amounted to Rs. 30,20,000. An analysis showed that goods of the value of Rs. 3,00,000 had been returned by the customers before the date of fire.
 - (2) Opening stock on 1.4.2011 was Rs. 2,20,000 including stocks of value of Rs. 20,000 being lower of cost and net value subsequently realised.
 - (3) Purchases between 1.4.2011 and 30.6.2011 were Rs. 21,00,000
 - (4) Normal gross profit rate was 33-1/3% on sales.
 - (5) A sum of Rs. 30,000 was incurred by way of fire fighting expenses on the day of the fire.

Prepare a statement showing the insurance claim recoverable.

(Hints: Claim Rs. = Rs. 3,29,000)

3. A fire occurred in the premises of Agni on 25th August, 2011 when a large part of the stock was destroyed. Salvage was Rs. 15,000. Agni gives you the following information for the period of January 1, 2011 to August 25th, 2011:
- (a) Purchases Rs. 85,000.
 - (b) Sales Rs. 90,000
 - (c) Goods costing Rs. 5,000 were taken by Agni for personal use.
 - (d) Cost price of stock on January 1, 2011 was Rs. 40,000

Over the past few years, Agni has been selling goods at a consistent gross profit margin of 33-1/3%.

The insurance policy was for Rs. 50,000. It included an average clause.

Agni asks you to prepare a statement of claim to be made on the insurance company.

(Hints: Admissible claim Rs. 37,500)