Insurance Claim for Loss of Stock and Loss of Profit

7

This Module Includes

7.1 Insurance Claim for Loss of Stock

7.2 Insurance Claim for Loss of Profit

Insurance Claim for Loss of Stock and Loss of Profit

SLOB Mapped against the Module

To equip oneself with the detail understanding of accounting of certain special transactions to determine surplus, ensure control on resources, for divisional performance evaluation or acquisition of assets through deferred payments. (CMLO 2a, 4c)

Module Learning Objectives:

After Studying this module, the students will be able to:

- Determine the amount of insurance claim for loss of stock; and
- Ascertain the amount of insurance claim for loss of profit

Insurance Claim for Loss of Stock

7.1

During the course of running the operations, an organization may face different adversities like accidents. Such accidents, may happen in the premises of an organization (viz. factory, godown, shop etc.) and cause damage to various assets used by such organization. The physical assets present in the premises are the fixed assets (viz. building, machineries, furnitures etc.) and stock. To replenish the mutilated assets, the business immediately needs some money. So, to cover the risks of such losses, it takes on a policy with insurance company(s) so as to recover a part or whole of the loss.

The business pays insurance premium yearly or quarterly or as per agreement. If any accidental loss occurs, the business has to compute the amount of loss and file a claim for compensation to the insurance company. The insurance company, in turn, appoints loss assessors to investigate the reasons and extent of the loss. As per the report of the loss assessor, insurance claims are met.

Loss of Stock

Of the different forms of accidental losses, loss by fire is the most common one. A fire insurance policy is usually taken to cover two types of losses: 1. Loss of Stock and 2. Loss of Profits.

As stocks constitute a considerable portion of the working capital of any business and specially for trading concerns, any loss of stock directly affects the solvency of the business. A business has to cover this risk adequately.

Determination of Amount of Insurance Claim

The amount of insurance claim to be made by the organisation which suffered the loss depends on the following factors:

1. **Value of stock present at the time of accident:** If stock records and stock are destroyed, it becomes difficult to ascertain the amount of stock lost. When the loss suddenly occurs, up-to-date value of stock does not become available. In that case, the value of stock present can be ascertained using relevant information, and by drafting a Memorandum Trading Account. A Memorandum Trading Account is actually a statement (not an account) which is prepared following the proforma of a Trading Account. It has to be prepared starting from the first date of the accounting period in which the accident has taken place and ending on the date of accident. Its specimen is as follows:

Memorandum Trading A/c for the period April 1 of year of accident – Date of accident

Particulars	(₹)	Particulars	(₹)
To Opening Stock	***	By Sales	***
To Purchases	***	By Closing Stock	***
To Gross Profit	***	[Balancing Figure]	
[Sales × GP rate]	***		***

It is to be noted that in Memorandum Trading Account, the Gross Profit is estimated by multiplying 'Sales' for this period with the rate of Gross Profit (GP). The GP rate may be known to the entity or it has to be ascertained. The GP rate is usually estimated on the basis of the details of the last accounting period. The organisation determines the GP rate by preparing the Trading Account for the accounting period immediately preceding the period in which the accident has occurred.

NB: Adjustments may be necessary while preparing the Trading Accounts of the current period and preceding accounting years for slow-moving items, abnormal or defective items not fetching same rate of gross profit, goods distributed as samples, goods taken away by proprietors, over or under valuation of stocks, omission of recording of stocks, etc.

2. **Value of stock salvaged:** It is the quantity of stock that could be saved from the accident. The value of this salvaged stock is to be deducted from the 'value of stock present at the time of accident' for ascertaining the 'value of stock lost by the accident' which represents the 'Gross Claim' to be lodged.

3. **Contents of the insurance policy:** The insurance policy includes details like policy value, average clause etc. Policy Value is the maximum amount that can be realized by the insured from the insurance company on the occurrence of the accident. It influences the amount of net claim that can be lodged by the insured. Average Clause simply states that in the absence of adequate insurance coverage, the insurance company will not shoulder the entire risk. It is a tool of the insurance company to discourage under-insurance by the insured. This clause implies that in case of under-insurance, the insured will also have to share a portion of the loss along with the insurance company. It is to be noted that Average Clause will not be applicable if the policy value is greater than or equal to the value of stock on the date of fire. In case of under-insurance, the net claim from the insurance company will be lower than the Gross Claim. On application of Average Clause, Net Claim will be computed as under:

$$\text{Net Claim} \times \frac{\text{Policy Value}}{\text{Value of stock lost on date of accident}}$$

Certain special situations

Goods-in-Transit or Goods sent to branches/ consignee: The cost of Goods-in-transit is to be deducted from 'Purchases' figure in Trading A/c or Memorandum Trading A/c, as the case may be. Alternatively, the cost of such goods may also be credited to the Trading A/c or Memorandum Trading A/c.

Goods sold but not yet to be delivered: Sale value of such goods is to be deducted from 'Sales' figure in Trading A/c or Memorandum Trading A/c.

Goods sent on approval basis: Cost of such goods is to be deducted from 'Purchases' figure in Trading A/c or Memorandum Trading A/c, as the case may be. Further, deduct the sale value of such goods from 'Sales' figure in Trading A/c or Memorandum Trading A/c.

Change in price level

For applying the GP rate determined sale of the period in which loss has occurred in the Memorandum Trading A/c, the effect of such price changes have to be nullified from the different items of Memorandum Trading A/c. For this purpose the method of stock pricing (i.e. FIFO, LIFO etc.) is to be considered.

Under-valued or Over-valued stock

When the stock is valued at a figure higher or lower than the cost, it affects the normal GP rate. When stock is under-valued, amount of under-valuation is added back to the respective stock to arrive at the cost; while in case of over-valuation, the over-valued amount is to be deducted to arrive at the cost of such stock. Further, for calculation of Gross Claim, the unsold portion of such under/ over-valued stocks is to be considered.

Abnormal/ Defective/ Usual Selling line Items: Goods which cannot fetch the usual rate of gross profit are considered as referred to as unusual or abnormal items. For preparing the Memorandum Trading Account, the portion of the value of such goods which has not yet been written off, should be deducted from the Opening Stock. If any such goods have been purchased in the current period, the Cost Price of such goods should be deducted from purchases. If any portion of such goods have been sold in the current period, the Selling Price should be deducted from current sales. Lastly if any portion of such, goods remains unsold on the date of fire, the agreed value of such portion should be added with the estimated value of normal stock to arrive at the estimated value of (total) stock on that date. Similar adjustments may be required while preparing the Trading Account of the last financial year/s, if abnormal items existed then. As an alternative measure, columnar Trading Account showing normal and abnormal items separately may be prepared.

Illustration 1

A fire occurred on 15th September 2023 in the premises of Sen & Co. from the following figures, calculate the amount of claim to be lodged with the insurance company for loss of stock.

Particulars	(₹)
Stock at cost on 1.1.2022	40,000
Stock at cost on 1.1.2023	60,000
Purchases in 2022	80,000
Purchase from 1.1.2022 to 15.9.2023	1,76,000
Sales in 2022	1,20,000
Sales from 1.1.2023 to 15.9.2023	2,10,000

During the current year cost of purchase has risen by 10% above last years' level. Selling prices have gone up by 5%. Salvage value of stock after fire was ₹ 4,000.

Solution:

Memorandum Trading Account for the period from 1.1.2023 to 15.9.2023

Particulars	Current Year (₹)	Last Year (₹)	Particulars	Current Year (₹)	Last Year (₹)
To Opening Stock	60,000	60,000	By Sales	2,10,000	2,00,000
,, Purchase	1,76,000	1,60,000	By Closing Stock	1,32,000	1,20,000
,, Gross Profit	1,06,000 (B/fig.)	1,00,000 (50% of Sales)			
	3,42,000	**3,20,000**		**3,42,000**	**3,20,000**

Working Notes:

1. Value of Closing Stock

	(₹)
Stock at last years' level	60,000
Add: 10% increase in cost of purchase	6,000
	66,000

Amount of Claim	(₹)
Closing Stock	1,32,000
Less: Stock Salvaged	4,000
Actual Value of Stock last	1,28,000
Actual Value of Stock Loss	

Trading Account (for ascertaining rate of Gross Profit)

Dr. **For the year ended 31.12.2022** **Cr.**

Particulars	(₹)	Particulars	(₹)
To, Opening Stock	40,000	By, Sales (less returns)	1,20,000
To, Purchase (less returns)	80,000	By, Closing Stock	60,000
To, Gross profit (bal. fig.)	60,000		
	1,80,000		**1,80,000**

∴ Percentage of gross profit on sales = (Gross Profit/Sales) × 100
= (₹60,000/₹1,20,000) × 100
= 50%

Illustration 2

Mr. X's godown was destroyed by fire on 1.6.2023 when the goods in stock were insured for ₹ 60,000. The following particulars are given:

Balance Sheet (Extract)
as at 31st December 2022

Liabilities	(₹)	Asset	(₹)
Creditor for goods	20,000	Stock (including goods held by agent ₹ 2,000)	36,000
		Debtors	70,000

Transactions upto 31st May, 2023 include:

Particulars	(₹)	Particulars	(₹)
Cash Received from Debtors	3,40,000	Cash paid to Creditors	2,20,000
Bad Debt written off	3,500	Discount Received	1,000
Balance on 31.5.2023:			
Debtors	70,000		
Creditors	30,000		

Additional information:

(i) Debtors on 31.5.2023, included an amount owing from the agent from sales to date ₹ 4,000 less 10% commission and his expenses amounting to ₹ 100 on 31.5.2023 – the agent still held the said goods valued at ₹ 3,600 (at selling price).

(ii) Sales (total) for the periods include ₹ 1,600 for goods which have the selling price reduced by 50% and also ₹ 6,000 reduced by 25%.

(iii) The normal mark up is 50% on cost and except the above, all sales can be assumed to be at the full selling price.

(iv) All the goods were destroyed and there was no salvage value of the goods.

Calculate the amount of claim.

Solution:

In the Books of Mr. X

Dr. **Debtors Account** **Cr.**

Date	Particulars	(₹)	Date	Particulars	(₹)
2023			2023		
Jan 1	To Balance b/d	70,000	May 31	By Cash Received	3,40,000
May 31	,, Sales (bal. fig.)	3,40,000		,, Bad Debts	3,500
				,, Balance c/d	66,500
		4,10,000		(excluding form agent)	**4,10,000**

Dr. **Creditors Account** **Cr.**

Date	Particulars	(₹)	Date	Particulars	(₹)
2023			2023		
May, 31	To Cash paid	2,20,000	Jan. 1	By Balance b/d	20,000
	,, Discount Received	1,000			
	,, Balance c/d	30,000	May 31	,, Purchase (bal. fig)	2,31,000
		2,51,000			**2,51,000**

Dr. **Godown Stock Account** **Cr.**

Date	Particulars	(₹)	Date	Particulars	(₹)
2022			2022	By Cost of Goods Sold	2,29,066
May 31	To Balance b/d (₹ 36,000 – ₹ 2,000)	34,000	May 31	,, Stock at Agents	3,067
	,, Purchase from the Creditors)	2,31,000		,, Stock Destroyed by fire (bal. fig)	32,867
		2,65,000			**2,65,000**

Thus, amount of claim which will be lodged for ₹ 32,867.

Working Notes:

1. Bad Debts

Particulars		(₹)
Sales		4,000
Less: Commission @10%	400	
Expenses	100	500
		3,500

2. Cost of Goods Sold

Sales (₹)	Normal Selling Price (₹)	Cost (2/3 of Selling Price) (₹)
1,600	3,200	2,133
6,000	8,000 [6,000 × (100/75)]	5,333
3,32,400 (bal. fig.)	–	2,21,600
3,40,000		2,29,066

3. Stock at Agent

Sales (₹)	Cost (₹)
4,000	2,667 (₹ 4,000 × 2/3)
—	2,400 (₹ 3,600 × 2/3)
	5,067
Less: Agents' hand at the beginning	2,000
	3,067

Illustration 3

X Ltd. has taken out a fire policy of ₹ 1,60,000 covering its stock. A fire occurred on 31st March, 2023. The following particulars are available :

	₹
Stock as on 01.04.2022	60,000
Purchases to the date of fire	2,60,000
Sales to the date of fire	1,80,000
Carriage Inwards	1,600
Commission on purchase to be paid	@2%
Gross Profit Ratio @ 50% on cost	

You are asked to ascertain (i) total loss of stock; (ii) amount of claim to be made against the Insurance Company assuming that the policy was subject to average clause. Stock salvage amounted to ₹41,360.

Solution:

In the books of X Ltd.

Memorandum Trading Account for the period ended 31st March, 2023

Particulars	(₹)	(₹)	Particulars	(₹)
To Opening Stock		60,000	By Sales	1,80,000
" Purchase	2,60,000		" Closing Stock	2,06,800
Add: Carriage Inward	1,600		(bal. figure)	
Add: Com. on Purchase	5,200	2,66,800		
" Gross Profit		60,000		
(@ 50% on cost or 33 % on sale)				
		3,86,800		**3,86,800**

Note: Carriage Inward and Com. on Purchase are direct expenses and hence, these are added to purchases.

Loss of Stock:

	(₹)
Stock at the date of fire	2,06,800
Less: Stock Salvaged	41,360
Loss of Stock	**1,65,440**

Amount of claim applying Average Clause

$$\text{Amount of Claim} = \text{Actual Loss} \times \frac{\text{Amount of Policy}}{\text{Value of stocks at the date of fire}}$$

$$= ₹\ 1,65,440 \times (₹\ 1,60,000/ ₹\ 2,06,800)$$

$$= ₹\ 1,28,000$$

Illustration 4

A fire occurred in the premises of Sri. G. Vekatesh on 1.4.2023 and a considerable part of the stock was destroyed. The stock salvaged was ₹ 28,000. Sri Venkatesh had taken a fire insurance policy for ₹ 17,10,000 to cover the loss of stock by fire.

You are required to ascertain the insurance claim which the company should claim from the insurance company for the loss of stock by fire. The following particulars are available:

	(₹)		(₹)
Purchases for the year 2022	9,38,000	Stock on 1.1.22	1,44,000
Sales for the year 2022	11,60,000	Stock on 31.12.2022	2,42,000
Purchases from 1.1.23 to 1.4.23	1,82,000	Wages paid during 2022	1,00,000
Sales from 1.1.23 to 1.4.23	24,00,000	Wages paid 1.1.23 to 1.4.23	1,80,000

Sri Venkatesh had in June 2022 consigned goods worth ₹ 50,000, which unfortunately were lost in an accident. Since there was no insurance cover taken, the loss had to be borne by him full.

Stocks at the end of each year for and till the end of calendar year 2021 had been valued at cost less 10%. From 2022, however there was a change in the valuation of closing stock which was ascertained by adding 10% to its costs.

Solution:

In order to find the rate of gross profit on sales for the year 2022, the following Trading Account is to be prepared for the same year as:

Trading Account

Dr. **For the year ended 31st Dec. 2022** **Cr.**

Particulars	(₹)	Particulars	(₹)
To Opening Stock	1,60,000	By Sales	11,60,000
1,44,000 × (100/90)		By Stock lost by Accident	50,000
To Purchases	9,38,000	By Closing Stock (2,42,000 ×100/110)	2,20,000
To Wages	1,00,000		
To Profit & Loss A/c (G.P. transferred)	2,32,000		
	14,30,000		**14,30,000**

Rate of Gross Profit on Sales = 2,32,000/11,60,000 × 100 = 20%

Dr. **Trading Account for the period (from 1.1.23 to 1.4.23)** **Cr.**

Particulars	(₹)	Particulars	(₹)
To Opening Stock	2,20,000	By Sales	2,40,000
To Purchases	1,82,000	By Closing Stock	2,28,000
To Wages	18,000		
To Profit & Loss A/c (G.P. @20% of sales)	48,000		
	4,68,000		**4,68,000**

Amount of Claim = Stock destroyed – Stock salvaged

= ₹ 2,28,000 – ₹ 28,000

= ₹ 2,00,000

As the policy amount is less than the value of stock destroyed, average clause is applicable. Here, the amount of claim will be:

Net Claim = Loss of Stock × (Amount of Policy / Stock at the date of fire)

= ₹ 2,00,000 × (1,71,000 / 2,28,000)

= ₹ 1,50,000/-

Illustration 5

On 1.4.2022, godown of Y Ltd. was destroyed by fire. The records of the company revealed the following particulars:

	(₹)
Stock on 1.1.2022	75,000
Stock on 31.12.2022	80,000
Purchases during 2022	3,10,000
Sales during 2022	4,00,000
Purchase from 1.1.2023 to the date of fire	75,000
Sales from 1.1.2023 to the date of fire	1,00,000

In valuing Closing Stock of 2022, ₹ 5,000 was written off whose cost was ₹ 4,800. Part of this stock was sold in 2023 at a loss of ₹ 400, at ₹ 2,400. Stock salvaged was ₹ 5,000. The godown and the cost of which was fully insured.

Indicate from above amount of claim to be made against the insurance company.

Solution:

(a) For ascertaining the rate of Gross Profit

In the books of Y Ltd.

Dr. Trading Account for the year ended 31.12.2022 Cr.

Particulars	(₹)	(₹)	Particulars	(₹)	(₹)
To Opening Stock		75,000	By Sales		4,00,000
" Purchases	3,10,000		" Closing Stock	80,000	
Less: Purchase of Abnormal items of goods	4,800	3,05,200	Add: Loss on value of abnormal items	200	80,200
" Gross Profit (bal. fig.)		1,00,000	(₹ 5,000 – ₹ 4,800)		
		4,80,200			**4,80,200**

$$\text{Percentage of Gross Profit on sales} = \frac{₹\ 1,00,000}{₹\ 4,00,000} \times 100$$

$$= 25\%$$

Memorandum Trading Account
for the period ended 31st March, 2023

Particulars	(₹)	Particulars	(₹)	(₹)
To Opening Stock	80,200	By Sales	1,00,000	
" Purchases	75,000	Less: Sale of abnormal Stock (₹ 2,400 – ₹ 400)	2,000	98,000
" Gross Profit (@25% on ₹ 98,000)	24,500	" Closing Stock (bal. fig.)		81,700
	1,79,700			**1,79,700**

Alternative approach

In a combined form

Trading Account

Dr. **for the year ended 31st December, 2023** **Cr.**

Particulars	Normal Items (₹)	Abnormal Items (₹)	Total (₹)	Particulars	Normal Items (₹)	Abnormal Items (₹)	Total (₹)
To Opening Stock	75,000	---	75,000	By Sales	4,00,000	---	4,00,000
„ Purchase				„ Closing Stock	80,200	(-) 200	80,000
„ Gross Profit @25% on sales	3,05,200	4,800	3,10,000	„ Gross Loss			
	1,00,000	---	1,00,000		---	5,000	5,000
	4,80,200	**4,800**	**4,85,000**		**4,80,200**	**4,800**	**4,85,000**

Memorandum Trading Account

for 3 months ending 31st March, 2023

Particulars	Normal Items (₹)	Abnormal Items (₹)	Total (₹)	Particulars	Normal Items (₹)	Abnormal Items (₹)	Total (₹)
To Opening Stock	80,200	(-) 200	80,000	By Sales	98,000	2,000	1,00,000
„ Purchase				„ Closing Stock	81,700	2,400	84,100
„ Gross Profit	75,000	---	75,000	(bal. fig)			
	24,500	4,600	29,100				
	1,79,700	**4,400**	**1,84,100**		**1,79,700**	**4,400**	**1,84,100**

1. 50% of ₹ 4,800 i.e., remaining abnormal stocks are valued at cost.

Amount of Claim	(₹)
Value of Stock at the date of fire	84,100
Less: Stock Salvaged	5,000
	79,100

Illustration 6

On 30.09.2023 the stock of Harshvardhan was lost in a fire accident. From the available records the following information is made available to you to enable you to prepare a statement of claim of the insurer:

Particulars	(₹)	Particulars	(₹)
Stock at cost on 1.4.2022	75,000	Sales less returns for the year ended 31.3.2023	6,30,000
Stock at cost on 31.3.2023	1,04,000	Purchase less returns up to 30.09.2023	2,90,000
Purchases less returns for the year ended 31.3.2023	5,07,500	Sales less returns up to 30.09.2023	3,68,100

In valuing the stock on 31.03.2023 due to obsolescence 50% of the value of the stock which originally cost

₹ 12,000 had been written-off. In May 2023, ¾th of these stocks had been sold at 90% of original cost and it is now expected that the balance of the obsolete stock would also realize the same price, subject to the above, G.P had remained uniform throughout stock to the value of ₹ 14,400 was salvaged.

Solution:

Memorandum Trading Account
for the period ended 30.09.2023

Particulars	Normal Items (₹)	Abnormal Items (₹)	Total (₹)	Particulars	Normal Items (₹)	Abnormal Items (₹)	Total (₹)
To Opening Stock	98,000	6,000	1,04,000	By Sales	3,60,000	8,100	3,68,100
,, Purchase	2,90,000	---	2,90,000	(Less returns)			
(Less: Returns)				,, Closing Stock	1,18,000	2,700	1,20,700
,, Gross Profit	90,000	4,800	94,800				
(25% on Normal Sales)	**4,78,000**	**10,800**	**4,88,800**		**4,78,000**	**10,800**	**4,88,800**

∴ **Amount of Claim** (₹)

Stock at the date of fire	1,20,700
Less: Stock Salvaged	14,400
	1,06,300

Working Notess:

Trading Account
Dr. **for the year ended 31.03.2023** **Cr.**

Particulars	(₹)	Particulars	(₹)
To Opening Stock	75,000	By Sales (Less: Returns)	6,30,000
,, Purchase (Less: Returns)	5,07,500	,, Closing Stock	1,10,000
,, Gross Profit	1,57,500		
	7,40,000		**7,40,000**

$$\text{So, Percentage of Gross Profit on sales} = \frac{₹\ 1,57,500}{₹\ 6,30,000} \times 100$$

$$= 25\%$$

1. Closing Stock

Particulars	(₹)
Closing Stock	1,04,000
Add: Stock Written off	6,000
	1,10,000

2. Sale of Abnormal Items of goods

$$₹\ 12,000 \times \frac{3}{4} \times (90/100) = ₹\ 8,100$$

3. Closing Stock of Abnormal Items

$₹\ 12,000 \times \frac{1}{4} \times (90/100) = ₹\ 2,700$

Illustration 7

A fire occurred in the premises of M/s Bad Luck Traders twice during the accounting year 2022-23 that is on 31st August 2022 and again on 30th November, 2022. From the following particulars, calculate the claim to be lodged in respect of the goods lost by fire on the aforementioned date:

1. The stock as at 31st March, 2022 was valued at ₹ 59,000.
2. The purchases from 1st April, 2022 to 31st August, 2023 amounted to ₹ 3,45,000.
3. The purchases from 1st September, 2022 to 30th November, 2022 amounted to ₹ 1,90,000 of which goods costing ₹ 45,000 were received on 10th December, 2022.
4. Sales for the period from 1st April, 2022 to 31st August, 2022 amounted to ₹ 4,71,000.
5. The sales for the period from 1st September, 2022 to 30th November, 2022 amounted to ₹ 2,25,000. It includes sale of old furniture of ₹ 27,000.

The company earns a steady rate of Gross profit at 20% at the beginning of the year 2022. However, the selling price was raised by 20% from the month of April.

The value of the goods salvaged was ₹ 30,000 and ₹ 2,000 on 31st August, 2022 and on 30th November, 2022 respectively.

The firm had taken out a fire insurance policy of ₹ 45,000 on 1st April, 2022. At the time of receiving the insurance claim on 31st August, 2022, no additional premium was paid for restoration of the insurance policy to its original amount. The policy was subject to average clause.

Solution:

Amount of stock lost on August 31, 2022

Particulars	(₹)
Value of stock on date of fire (WN-2)	90,000
Less: Value of stock salvaged	30,000
∴ **Actual Loss of Stock**	60,000

Applicability of Average Clause (for first insurance claim)

Here, Insurable Value = Value of stock on date of fire = ₹90,000; Policy Value = ₹45,000. There is under-insurance.

∴ Average clause will be applicable.

$$\therefore \text{Net Claim} = \text{Actual loss of Stock} \times \frac{\text{Policy Value}}{\text{Insurable Value}}$$

$$= 60,000 \times \frac{45,000}{90,000} \quad = ₹\ 30,000$$

Amount of stock lost on November 30, 2022

Particulars	(₹)
Goods destroyed by fire (WN-3)	43,000
Less: Value of stock salvaged	2,000
∴ **Actual Loss of Stock**	41,000

Applicability of Average Clause (for second insurance claim)

Here, Insurable Value = Value of stock on date of fire = ₹43,000; Policy Value = ₹15,000 [WN: 4]

In this case also there is under-insurance.

∴ Average clause will be applicable.

$$\therefore \text{Net Claim} = \text{Actual loss of Stock} \times \frac{\text{Policy Value}}{\text{Insurable Value}}$$

$$= 41{,}000 \times \frac{15{,}000}{43{,}000}$$

$$= ₹\ 14{,}302 \text{ (approx,)}$$

Working Notess:

1. New Rate of GP in 2022-23:

	Sale price	Gross Profit
Normal Price	100	20
Add: Increase in sale Price	20	20
	120	40

$$\therefore \text{Rate of GP in 2022-22} = \frac{40 \times 100}{120} = 33.33\ \%$$

2. Stock on the date of first accident i.e. August 31, 2022

Memorandum Trading Account for the period Apr. 1 – Aug. 31, 2022

Particulars	(₹)	Particulars	(₹)
To Opening Stock	59,000	By Sales	4,71,000
To Purchases	3,45,000	By Closing Stock [Bal. Fig.]	90,000
To Gross Profit [₹ 4,71,000 × 33.33% (WN: 1)	1,57,000		
	5,61,000		**5,61,000**

3. Stock on the date of second accident i.e. November 30, 2022

Memorandum Trading Account
for the period Sept. 1 – November 30, 2022

Particulars	(₹)	(₹)	Particulars	(₹)	(₹)
To Opening Stock		30,000	By Sales	2,25,000	
To Purchases	1,90,000		Less: Sale of furniture	27,000	1,98,000
Less: Goods-in-Transit	45,000	1,45,000			
			By Closing Stock [Bal. Fig.]		43,000
To Gross Profit		66,000			
[₹ 1,98,000 × 33.33%]		**2,41,000**			**2,41,000**

4. Policy Value of the fire insurance policy

- **For the first insurance claim**

  The value of fire insurance policy taken = ₹ 45,000

- **For the second insurance claim**

  As the original policy was not restored at the time of receiving the insurance claim on 31.8.2022, the subsequent 'Policy Value' will get reduced by the amount of insurance claim received.

  ∴ revised policy value = Original policy value – Compensation received on first insurance claim
  = ₹ 45,000 – ₹ 30,000
  = ₹ 15,000

Insurance Claim for Loss of Profit

7.2

During regular course of operations an organization may suffer from different types of accidents. Such accidents may occur due to natural calamities, human induced accidents. Such accidents usually hamper the regular operations of the organisation, and thus in turn affecting the organisation's profitability. To cover such risk, the organization usually enters into a contract with insurance company to cover the risk of loss of profit. Such a policy is known as 'Loss of Profit policy' or 'Consequential Loss policy'.

For determination of the amount of claim for 'Loss of Profit policy', the organization needs to ascertain the amount of profit which the organization could have earned. In relation to determination of such loss of profit, the following terms are significant:

- **Indemnity period:** The period for which normal activities of the business is interrupted is known as indemnity period.
- **Standard turnover:** The turnover of the previous year corresponding to the period of indemnity after adjustment of trend in turnover.
- **Adjusted annual turnover:** Turnover during 12 months immediately preceding the date of damage (taking trend into consideration).
- **Standing charges:** Unavoidable fixed expenses which have to be paid even if there is reduction in sale.

Calculation of the Net Claim under Loss of Profit Policy

The amount of net claim is determined through the following steps:

Step 1	Ascertainment of Gross Profit (GP) for previous accounting period: **1. In case of existence of Net profit** GP = Net Profit for Previous Accounting Period + Insured Standing Charges. **2. In case of existence of Net loss** $GP = \text{Insured standing charges} - \left[\text{Net Loss} \times \frac{\text{Insured Standing Charges}}{\text{All Standing Charges}}\right]$
Step 2	Determination of GP rate $\text{GP rate} = \frac{GP}{\text{Sales}} \times 100$
Step 3	Calculate Short Sales Short Sales = Standard Turnover – Actual Turnover for Indemnity Period.

Step 4	Calculate GP Lost on Short Sales: GP Lost = Short Sale × GP rate
Step 5	Determine admissible additional expenses for insurance claim: Least of the following: i. Actual additional expenses ii. Sales due to additional expenses × GP rate iii. Actual additional expenses × $\frac{\text{Net Profit + Insured Standing Charges}}{\text{Net Profit + All Standing Charges}}$
Step 6	Calculation of Gross Claim Gross claim = GP lost + Admissible Expenses for Insurance Claim – Saving in Standing Chages.
Step 7	Insurable value = Adjusted Annual Turnover × GP rate
Step 8	Claim to be lodged: **Situation 1: When average clause is applicable(insurable value > policy value)** Net Claim = $\frac{\text{Policy Value}}{\text{Insurable Value}}$ × Gross Claim **Situation 2: When average clause is Not applicable (insurable value is < policy value)** Net Claim = Gross Claim

NB: Some of the important points relating to the variables are as under:

- If additional Sales due to additional expenses is not given, assume that entire sale has been attained due to additional expenses.
- All standing charges = insured standing charges + uninsured standing charges.
- In absence of specific information assume that all standing charges are insured.
- If sales for past years is given we need to determine the trend of sales.

Illustration 8

On account of fire on June 15, 2023, in business house of a company, the working remained disturbed up to December 15, 2023 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 ₹ 1,40,000 and a period of 7 months has been agreed upon as indemnity period. An increase of 25% was marked in the current year's sales as compared to last year. The company incurred an additional expenditure of ₹ 12,000 to make sales possible and made a saving of ₹ 2,000 in insured standing charges.

Ascertain the claim under the consequential loss policy keeping the following additional information in view:

Particulars	(₹)	Particulars	(₹)
Actual sales from 15.6.23 to 15.12.23	70,000	Total standing charges for last financial year	1,20,000
Sales from 15.6.22 to 15.12.22	2,40,000	Turnover for last financial year	6,00,000
Net profit for the financial year	80,000	Turnover from 16.6.22 to 15.6.23	5,60,000
Insured standing charges for last financial year	70,000		

Solution:

GP for previous accounting period
= Net profit for previous accounting period + Insured standing charges.
= ₹ 80,000 + ₹ 70,000 = ₹ 1,50,000

$$\text{GP rate} = \frac{\text{GP}}{\text{Sales}} \times 100 = \frac{₹1,50,000}{₹6,00,000} \times 100 = 25\%$$

Short sale = standard turnover – actual turnover for indemnity period.
= ₹(2,40,000 × 125%) – ₹ 70,000 = ₹ 2,30,000

GP Lost = Short sale × GP rate
= ₹ 2,30,000 × 25% = ₹ 57,500

Admissible additional expenses for insurance claim

Least of the following:	(₹)
i. Actual additional exp.	12,000
ii. Sales due to additional expenses × GP rate (₹ 70,000 × 25%)	17,500
iii. Actual additional expenses × $\frac{\text{Net Profit + Insured standing charges}}{\text{Net Profit + All standing charges}}$	
₹ $(12000 \times \frac{80,000 + 70,000}{80,000 + 1,20,000})$	9,000
Admissible additional expenses	**9,000**

Gross claim = GP lost + admissible expenses for insurance claim – Saving in standing charges.
= ₹ (57,500 + 9,000 – 2,000) = ₹ 64,500

Insurable value = adjusted annual turnover × GP rate
= (₹ 5,60,000 × 125%) × 25% = ₹ 1,75,000

$$\text{Net Claim} = \frac{\text{Policy Value}}{\text{Insurable Value}} \times \text{Gross claim} = \frac{₹1,40,000}{₹1,70,000} \times ₹64,500 = ₹\ 53,118$$

Illustration 9

From following details, calculate consequential loss claim:

- Date of fire: Sept. 1
- Indemnity period: 6 months
- Period of disruption September 1 to February 1
- Sum insured ₹ 1,08,900
- Sales were ₹ 6,00,000 for preceding financial year ended 31st march.
- Net profit for preceding financial year ₹ 36,000 plus insured standing charges ₹ 72,000
- Rate of gross profit 18%
- Turnover during disruption period ₹ 67,500
- Uninsured standing charges ₹ 6,000

- Annual turnover for 12 months immediately preceding the date of fire ₹ 6,6,0000
- Standard turnover i.e. for corresponding months in the year preceding the date of fire ₹ 2,25,000
- Increase in the cost of working capital ₹ 12,000 with a saving of insured standing charges ₹ 4,500 during the disruption period;
- Reduced turnover avoided through increase in working capital ₹ 30,000
- A special clause stipulated:
  - Increase in rate of GP by 2%
  - Increase in turnover (standard and annual) 10%

Solution:

GP rate = 18% + 2% = 20%

Short sale = standard turnover – actual turnover for indemnity period.
= (₹ 2,25,000 × 110%) – ₹ 67,500 = ₹ 1,80,000

GP Lost = Short sale × GP rate
= ₹ 1,80,000 × 20% = ₹ 36,000

Admissible additional expenses for insurance claim

Least of the following:	(₹)
i. Actual additional exp.	12,000
ii. Sales due to additional expenses × GP rate (₹ 30,000 × 20%)	6,000
iii. Actual additional expenses × $\frac{\text{Net Profit + Insured standing charges}}{\text{Net Profit + All standing charges}}$	
₹ $(12000 \times \frac{36,000 + 72,000}{[36,000 + (72,000 + 6,000)]})$	11,368
Admissible additional expenses	**6000**

Gross claim = GP lost + admissible expenses for insurance claim – saving in standing charges
= ₹ (36,000 + 6,000 – 4,500) = ₹ 37,500

Insurable value = adjusted annual turnover × GP rate = (₹ 6,60,000 × 110%) × 20% = ₹ 1,45,200

Net Claim = $\frac{\text{Policy Value}}{\text{Insurable Value}} \times$ Gross claim = $\frac{₹1,08,900}{₹1,45,200}$ = × ₹ 37,500 = ₹ 28,125

Illustration 10

A fire occurred on Mar. 15, 2023 in the premises of Omega Ltd. A Loss of Profit policy was taken by Omega Ltd. for ₹ 80,000. The indemnity period was for 3 months. Net Profit for the year ending Dec. 31, 2021 was ₹ 56,000 and standing charges (all insured) amounted to ₹ 49,600. Determine insurance claim from the following details available from quarterly sales tax returns:

Sales	2019	2020	2021	2022
	(₹)	(₹)	(₹)	(₹)
From Jan.1 to Mar.31	1,20,000	1,30,000	1,42,000	1,30,000
From Apr.1 to June 30	80,000	90,000	1,00,000	40,000
From July 1 to Sept.30	1,00,000	1,10,000	1,20,000	1,00,000
From Oct.1 to Dec.31	1,36,000	1,50,000	1,66,000	1,60,000

	(₹)
Sales from 16.3.2022 to 31.3.2022	28,000
Sales from 16.3.2023 to 31.3.2023	Nil
Sales from 16.6.2022 to 30.6.2022	24,000
Sales from 16.6.2023 to 30.6.2023	6,000

Solution:

Statement of Claim for Loss of Profit

Particulars	(₹)
GP lost on Short Sales [WN: 4]	16,080
Less: Savings in Standing Charges	Nil
∴ Gross Claim	16,080

$$\therefore \textbf{Net Claim} \text{ (under "Average clause")} = \text{Gross Claim} \times \frac{\text{Policy Value}}{\text{Insurable Value}}$$

$$= ₹\ 16{,}080 \times \frac{80{,}000}{1{,}19{,}680}$$

$$= ₹\ 10{,}749 \text{ (Approx.)}$$

Working Notes:

WN: 1 Trend of Turnover of last few years

Sales of: 2020 = ₹ (1,20,000 + 80,000 + 1,00,000 + 1,36,400) = ₹ 4,36,400

2021 = ₹ (1,30,000 + 90,000 + 1,10,000 + 1,50,000) = ₹ 4,80,000

2022 = ₹ (1,42,000 + 1,00,000 + 1,20,000 + 1,66,000) = ₹ 5,28,000

$$\text{Rate of Turnover change} = \frac{\text{Turnover of the current year} - \text{Turnover of the previous year}}{\text{Turnover of the previous year}} \times 100$$

$$\text{For 2022} = \frac{5{,}28{,}000 - 4{,}80{,}000}{4{,}80{,}000} \times 100 = 10\%$$

$$\text{For 2021} = \frac{4{,}80{,}000 - 4{,}36{,}400}{4{,}36{,}400} \times 100 = 10\% \text{ (approx.)}$$

Thus, we observe a 10% upward trend in turnover over the last few years.

2. Calculation of GP Rate

Particulars	(₹)
Net Profit of 2022	56,000
Add: Insured Standing Charges	49,600
∴ Insured Gross Profit	1,05,600

Sales of 2022 = ₹ 5,28,000 (as computed above)

$$\therefore \text{ Rate of Gross Profit in 2022} = \frac{\text{Gross Profit}}{\text{Sales}} \times 100$$

$$= \frac{1,05,600}{5,28,000} \times 100$$

$$= 20\ \%$$

3. Calculation of Short Sales

Particulars	(₹)	(₹)
Standard Turnover (from March 15, 2023 to June 15, 2023):		
Turnover from April 1, 2022 to June 30, 2022	1,00,000	
Add: Turnover from March 16, 2022 to March 31, 2022	28,000	
	1,28,000	
Less: Turnover from June 16, 2022 to June 30, 2022	24,000	1,04,000
Add: Upward trend @ 10% [WN: 1]		10,400
		1,14,400
Less: Actual Turnover (from March 15, 2023 to June 15, 2023)		
Turnover from April 1, 2023 to June 30, 2023	40,000	
Add: Turnover from March 16, 2023 to March 31, 2023	Nil	
	40,000	
Less: Turnover from June 16, 2023 to June 30, 2023	6,000	34,000
∴ Short Sales		80,400

4. GP lost on Short Sales

Short sales × Rate of GP = ₹ 80,400 × 20%

= ₹ 16,080

5. Annual Turnover i.e. Sale for the year ending March 15, 2022

	(₹)
From March 16, 2022 to March 31, 2022	28,000
From April 1, 2022 to June 30,2022	1,00,000
From July 1, 2022 to September 30,2022	1,20,000
From October 1, 2022 to December 31, 2022	1,66,000
From January 1, 2023 to March 31, 2023	1,30,000
	5,44,000
Less: March 16, 2023 to March 31, 2023	Nil
	5,44,000

6. Applicability of Average Clause

Insurable Value = Adjusted Annual Turnover × GP Rate = (₹ 5,44,000 × 110%) × 20% = ₹ 1,19,680

Policy Value = ₹ 80,000 (Given)

In this case, as Policy Value < Insurable Value, there is 'under insurance' and so Average Clause is applicable.

Exercise

A. Theoretical Questions:

⊙ **State True or False**

1. Salvage of stock means stock saved during accident.
2. Unusual item and defective item is separate under insurance claim
3. Defective items mean goods which cannot fetch the usual rate of gross profit.
4. Average clause is applicable in case of under insurance.
5. A memorandum trading account is to be prepared to ascertained the value of stock on the date of fire.
6. A marine insurance policy is taken to cover the claims for loss of stock.
7. The amount paid by insured to insurer as a consideration is known as premium.
8. Gross profit must always be calculated as a percentage on purchase.

Answers:

1	**True**	**2**	**False**	**3**	**True**	**4**	**True**
5	**True**	**6**	**False**	**7**	**True**	**8**	**False**

⊙ **Fill in the Blanks**

1. Standard turnover corresponds with the_____ period.
2. Under insurance claim 'Standing charges' means_____ Standing charges only.
3. If the policy value is _____ the value of stock lost, is called over insurance.
4. In case of Loss of Profit Policy, Gross Profit is the sum of Net Profit plus _____ Standing Charges.
5. If value of stock on the date of fire is ₹4,29,000, salvage is ₹15,70,000 then stock destroyed by fire will be _____.
6. Goods costing ₹ 1,0,000 were insured for ₹50,000. Out of these goods,3/4th are destroyed by fire. The amount of average clause will be ————————.
7. Loss of stock is calculated by deducting ———————— from book value of stock as on date of fire.
8. The difference between the value of stock on the date of fire and stock salvaged is ————————.

Answer:

1	**indemnity**	**2**	**insured**
3	**more than**	**4**	**Insured**
5	**₹ 2,71,500**	**6**	**₹ 37,500**
7	**Stock salvaged**	**8**	**Claim for loss of stock**

B. Numerical Questions

⊙ Comprehensive Numerical Problems

1. From the following information, calculate the amount of claim for loss of stock with Insurance Company B Ltd:

Particulars	Amount (₹)
Purchase for the year 2022	9,15,000
Sales for the year 2022	12,00,000
Purchase from 1.1.2023 to 30.6.2023	8,00,000
Sales from 1.1.2022 to 30.6.2023	9,90,000
Stock on 1.1.2022	1,35,000
Stock on 1.1.2023	1,50,000

You are informed that:

(i) In 2023, the purchase prices raised by 20% above the level prevailing in 2022.

(ii) In 2023, the selling prices hiked by 10% over the level prevailing in 2022.

(iii) Salvaged value of stock ₹20,000.

(iv) Fire insurance policy for ₹1,48,750 to cover the loss of stock by fire.

[**Answer:** Actual stock lost by fire ₹1,50,000, Claim to be made after applying Average Clause ₹1,31,250]

2. X & Co. suffered a loss of stock due to fire on 31.3.2023. From the following information prepare a statement showing the claim for the loss to be submitted:

Particulars	Amount (₹)
Purchase for the year 2022	3,20,000
Sales for the year 2022	4,05,200
Purchase from 1.1.2023 to 31.3.2023	1,08,000
Sales from 1.1.2023 to 31.3.2023	1,22,800
Stock on 1.1.2022	76,800
Stock on 1.1.2023	63,600

An item of goods purchased in 2021 at a cost of ₹20000 was valued at ₹12,000 on 31.12.2021. Half of these goods were sold during 2022 for ₹5,200 and the remaining stock was valued at₹4,800 on 31.12.2022. ¼th of the original stock was sold for ₹2,800 in February 2023 and the remaining stock was valued at 60% of the original cost. With the exception of this item, the rate of gross profit remained fixed. The stock salvaged was estimated at ₹24,000. The insurance policy value was for ₹3,00,000.

[**Answer:** Actual stock lost by fire ₹48,000]

3. A fire occurred on 1st February, 2023, in the premises of Legend Ltd., a retail store and business was partially disorganized upto 30th June, 2023. The company was insured under a loss of profits for ₹ 1,25,000 with a six months period indemnity. From the following information, compute the amount of claim under the loss of profit policy.

Actual turnover from 1st February to 30th June, 2023	₹	80,000
Turnover from 1st February to 30th June, 2022	₹	2,00,000
Turnover from 1st February, 2022 to 31st January, 2023	₹	4,50,000
Net Profit for last financial year	₹	70,000
Insured standing charges for last financial year	₹	56,000
Total standing charges for last financial year	₹	64,000
Turnover for the last financial year	₹	4,20,000

The company incurred additional expenses amounting to ₹ 6,700 which reduced the loss in turnover. There was also a saving during the indemnity period of ₹ 2,450 in the insured standing charges as a result of the fire.

There had been a considerable increase in trade since the date of the last annual accounts and it has been agreed that an adjustment of 15% be made in respect of the upward trend in turnover.

[**Answer:** Amount of claim under the policy ₹ 39,390]