CHAPTER 10

INSURANCE CLAIMS FOR LOSS OF STOCK AND LOSS OF PROFIT

LEARNING OUTCOMES

After studying this unit, you will be able to–

- Understand the significance of Claim for loss of stock and loss of profit.
- Comprehend with the terms Loss of profit; Standing Charges and Increased cost of working.
- Compute the amount of claim for loss of stock and loss of profit

CHAPTER OVERVIEW

- Amount of claim in case of
  - Total Loss (Goods fully destroyed)
    - Actual loss (provided the goods are fully insured)
  - Partial Loss (Goods partially destroyed)
    - Actual loss (subject to goods being fully insured and whether average clause is applicable or not)

- Amount of claim in case of Under insurance
  - Total Loss
    - Restricted to the policy amount
  - Partial Loss
    - Without Average clause
      - Actual loss Or Sum insured whichever is lower
    - With Average Clause
      - Loss of stock x sum insured / Insurable amount (Total Cost)

Claim for Loss of Profit	*The Loss of Profit Policy normally covers the following items:* *(1) Loss of net profit* *(2) 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.*
Rate of Gross Profit	*The rate of Gross Profit earned on turnover during the financial year immediately before the date of damage.*
Annual Turnover (adjusted)	*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*

1. INTRODUCTION

Business enterprises get insured against the loss of stock on the happening of certain events such as fire, flood, theft, earthquake etc. Insurance being a contract of indemnity, the claim for loss is restricted to the actual loss of assets. Sometimes an enterprise also gets itself insured against consequential loss of profit due to decreased turnover, increased expenses etc.

If loss consequential to the loss of stock is also insured, the policy is known as loss of profit or consequential loss policy.

Insurance claim can be studied under two parts as under:-

- Claim for loss of stock
- Claim for loss of profit

2. MEANING OF FIRE

For purposes of insurance, fire means:

1. Fire (whether resulting from explosion or otherwise) not occasioned or happening through:

   (a) Its own spontaneous fomentation or heating or its undergoing any process involving the application of heat;

   (b) Earthquake, subterraneous fire, riot, civil commotion, war, invasion act of foreign enemy, hostilities (whether war be declared or not), civil war, rebellion, revolution, insurrection, military or usurped power.

2. Lightning.

3. Explosion, not occasioned or happening through any of the perils specified in 1 (a) above.

   (i) of boilers used for domestic purposes only;

   (ii) of any other boilers or economisers on the premises;

   (iii) in a building not being any part of any gas works or gas for domestic purposes or used for lighting or heating the building.

The policy of insurance can be made to cover any of the excepted perils by agreement and payment of extra premium, if any. Damage may also be covered if caused by storm or tempest, flood, escape of water, impact and breakdown of machinery, etc., again by agreement with the insurer.

Usually, fire policies covering stock or other assets do not cover explosion of boilers used for domestic purposes or other boilers or economizers in the premises but policies in respect of profit cover such explosions.

3. CLAIM FOR LOSS OF STOCK

Fire insurance being a contract of indemnity, a claim can be lodged only for the actual amount of the loss, not exceeding the insured value. In dealing with problems requiring determination of the claim the following point must be noted:

(a) **Total Loss:** If the goods are totally destroyed, the amount of claim is equal to the actual loss, provided the goods are fully insured. However, in case of under insurance(i.e. insurable value of stock insured is more than the sum insured),the amount of claim is restricted to the policy amount.

(b) **Partial Loss:** If the goods are partially destroyed, the amount of claim is equal to the actual loss provided the goods are fully insured. However in case of under insurance, the amount of claim will depend upon the nature of insurance policy as follows:

- **(i)** **Without Average clause:** Claim is equal to the lower of actual loss or the sum insured.
- **(ii)** **With Average Clause:** Amount of claim for loss of stock is proportionately reduced, considering the ratio of policy amount (i.e. insured amount) to the value of stock as on the date of fire (i.e insurable amount) as shown below:

Amount of claim = Loss of stock × sum insured / Insurable amount (Total Cost)

One should note that the average clause applies only where the insured value is less than the total cost and not when goods are fully insured.

3.1 Relevant points

(i) Where **stock records are maintained** and such records are not destroyed by fire, the value of the stock as at the date of the fire can be easily arrived at.

(ii) Where either **stock records are not available** or where they are destroyed by the fire the value of stock at the date of the fire has to be estimated. The usual method of arriving at this value is to build up a Trading Account as from the date of last accounting year. After allowing for the usual gross profit, the figure of closing stock on the date of the fire can be ascertained as the balancing item.

(iii) **Where books of account are destroyed**, the task of building up the Trading Account becomes difficult. In that case information is obtained from the customers and suppliers have to be circularised to ascertain the amount of sales and purchases.

(iv) After the insurance company makes payment for total loss, it has the same rights which the insured had over the damaged stock. These are subrogated[1] to the insurance company. In practice, in determining the amount of the claim, credit is given for damaged and salvaged stock.

(v) Frequently salvaged stock can be made saleable after it is reconditioned. In that case, the cost of such stock must be credited to the Trading Account and debited to a salvaged stock account. The expenses on reconditioning must be debited and the sales credited to this account, the final balance being transferred to the Profit & Loss Account.

Loss of Stock

Amount of loss of stock is calculated as under:

Value of stock on the date of fire	XXXX
Less: Value of Salvaged stock	XXXX
Amount of loss of stock	XXXX

Particulars		Amount
Value of salvaged stock		xxx
Add:	Expenses on re-conditioning	xxx
Less:	Sales	xxx
Profit/ (loss)		**xxx**

[1] Subrogation is the right of an insurer to legally pursue a third party that caused an insurance loss to the insured, i.e., the right to sue the third party for the loss suffered by the insured.

Illustration 1

From the following information, ascertain the value of stock as on 31st March, 20X2:

	₹
Stock as on 01-04-20X1	*28,500*
Purchases	*1,52,500*
Manufacturing Expenses	*30,000*
Selling Expenses	*12,100*
Administration Expenses	*6,000*
Financial Expenses	*4,300*
Sales	*2,49,000*

At the time of valuing stock as on 31st March, 20X1, a sum of ₹ 3,500 was written off on a particular item, which was originally purchased for ₹ 10,000 and was sold during the year for ₹ 9,000. Barring the transaction relating to this item, the gross profit earned during the year was 20% on sales.

Solution

Statement showing valuation of stock as on 31.3.20X2

	₹	₹
Stock as on 01.04.20X1	28,500	
Less: Book value of abnormal stock (₹ 10,000 – ₹ 3,500)	6,500	22,000
Add: Purchases		1,52,500
Manufacturing expenses		30,000
		2,04,500
Less: Cost of Sales:		
Sales	2,49,000	
Less: Sale of abnormal stock	(9,000)	
	2,40,000	
Less: Gross profit @ 20%	(48,000)	(1,92,000)
Value of Stock as on 31st March, 20X2		12,500

Illustration 2

Mr. A prepares accounts on 30th September each year, but on 31st December, 20X1 fire destroyed the greater part of his stock. Following information was collected from his book:

	₹
Stock as on 1.10.20X1	*29,700*
Purchases from 1.10.20X1 to 31.12.20X1	*75,000*
Wages from 1.10.20X1 to 31.12.20X1	*33,000*
Sales from 1.10.20X1 to 31.12.20X1	*1,40,000*

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

Additional information:

(i) Stock at the beginning was calculated at 10% less than cost.

(ii) A plant was installed by firm's own worker. He was paid ₹ 500, which was included in wages.

(iii) Purchases include the purchase of the plant for ₹ 5,000

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

Solution

Computation of claim for loss of stock:

	₹
Stock on the date of fire i.e. 31.12.20X1(Refer working note)	30,500
Less: Salvaged stock	(3,000)
Loss of stock	27,500

Amount of claim

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

$$= \frac{₹\ 25,000}{₹\ 30,500} \times ₹\ 27,500 = ₹\ 22,541$$

Working Note:

Memorandum trading account can be prepared for the period from 1.10.*20*X1 to 31.12.*20*X1 to compute the value of stock on 31.12.*20*X1.

Memorandum Trading Account
for period from 1.10.20X1 to 31.12.20X1

	₹	₹		₹
To Opening stock (₹ 29,700 x 100/90)		33,000	By Sales	1,40,000
			By Closing stock (bal. fig.)	30,500
To Purchases	75,000			
Less: Cost of plant	(5,000)	70,000		
To Wages	33,000			
Less: Wages paid for plant	(500)	32,500		
To Gross profit (33.33% on cost or 25% on sales)		35,000		
		1,70,500		1,70,500

Illustration 3

On 20th October, 20X1, 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 31st March, 20X1	*2,16,000*
Purchases less returns (1.4.20X1 to 20.10.20X1)	*2,80,000*
Sales less returns (1.4.20X1 to 20.10.20X1)	*6,20,000*

Additional information:

(1) *Sales upto 20th October, 20X1 includes ₹ 80,000 for which goods had not been dispatched.*

(2) *Purchases upto 20th October, 20X1 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.

Solution

Memorandum Trading A/c
(1.4.20X1 to 20.10.20X1)

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%*)	1,35,000		
	6,95,000		6,95,000

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

	₹
Stock on the date of fire (i.e. on 20.10.20X1)	1,55,000
Less: Stock salvaged	(31,000)
Stock destroyed by fire	1,24,000

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

$$= \frac{1,24,000}{1,55,000} \times 1,00,000 = ₹\ 80,000$$

Working Note:

Stock as on 1st April, 20X1 was valued at 10% lower than cost.

Hence, original cost of the stock as on 1st April, 20X1 would be

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

Illustration 4

On 12th June, 20X2 fire occurred in the premises of N.R. Patel, a paper merchant. Most of the stocks were destroyed, cost of stock salvaged being ₹ 11,200. In addition, some stock was salvaged in a damaged condition and its value in that condition was agreed at ₹ 10,500. From the books of account, the following particulars were available.

1. *His stock at the close of account on December 31, 20X1 was valued at ₹ 83,500.*
2. *His purchases from 1-1-20X2 to 12-6-20X2 amounted to ₹ 1,12,000 and his sales during that period amounted to ₹ 1,54,000.*

On the basis of his accounts for the past three years it appears that he earns on an average a gross profit of 30% of sales.

Patel has insured his stock for ₹ 60,000. Compute the amount of the claim.

Solution

Computation of claim for loss of stock

	₹	₹
Opening Stock on 1-1-20X2		83,500
Add : Purchases during the period		1,12,000
		1,95,500
Less : Sales during the period	1,54,000	
Gross Profit thereon	46,200	(1,07,800)
		87,700
Less : Stock Salvaged	11,200	
Agreed value of damage Stock	10,500	(21,700)
		66,000
Amount of Claim = $\frac{60,000}{87,700} \times 66,000$ = ₹ 45,154		

Illustration 5

On 1st April, 20X2 the stock of Shri Ramesh was destroyed by fire but sufficient records were saved from which following particulars were ascertained:

	₹
Stock at cost-1st January, 20X1	*73,500*
Stock at cost-31st December, 20X1	*79,600*
Purchases-year ended 31st December,20X1	*3,98,000*
Sales-year ended 31st December, 20X1	*4,87,000*
Purchases-1-1-201X2 to 31-3-20X2	*1,62,000*
Sales-1-1-20X2 to 31-3-20X2	*2,31,200*

In valuing the stock for the Balance Sheet at 31st December, 20X1 ₹ 2,300 had been written off on certain stock which was a poor selling line having the cost ₹ 6,900. A portion of these goods were sold in March, 20X2 at loss of ₹ 250 on original cost of ₹ 3450. The remainder of this stock was now estimated to be worth its original cost. Subject to the above exception, gross profit had remained at a uniform rate throughout the year.

The value of stock salvaged was ₹ 5,800. The policy was for ₹ 50,000 and was subject to the average clause. Work out the amount of the claim of loss by fire.

Solution

Shri Ramesh
Trading Account for 20X1
(to determine the rate of gross profit)

		₹			₹	₹
To	Opening Stock	73,500	By	Sales A/c		4,87,000
To	Purchases	3,98,000	By	Closing Stock :		
To	Gross Profit (b.f.)	97,400		As valued	79,600	
				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 items ₹	Abnormal items ₹	Total ₹		Normal ₹	Abnormal items ₹	Total items ₹
To Opening Stock	75,000	6,900*	81,900	By Sales	2,28,000	3,200	2,31,200
				By Loss	—	250	250
To Purchases	1,62,000	—	1,62,000	By Closing Stock (bal. fig.)	54,600	3,450**	58,050
To Gross Profit (20% on ₹ 2,28,000)	45,600	—	45,600				
	2,82,600	6,900	2,89,500		2,82,600	6,900	2,89,500

* at cost, book value is ₹ 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:

$$= \frac{\text{Amount of Policy}}{\text{Value of Stock}} \times \text{Actual Loss of Stock}$$

$$= ₹\ \frac{50,000}{58,050} \times 52,250 = ₹\ 45,004$$

Illustration 6

On 19th May, 20X2, the premises of Shri Garib Das were destroyed by fire, but sufficient records were saved, wherefrom the following particulars were ascertained:

	₹
Stock at cost on 1.1.20X1	*36,750*
Stock at cost on 31.12.20X1	*39,800*
Purchases less returns during 20X1	*1,99,000*
Sales less return during 20X1	*2,43,500*

Purchases less returns during 1.1.20X2 to 19.5.20X2	*81,000*
Sales less returns during 1.1.20X2 to 19.5.20X2	*1,15,600*

In valuing the stock for the balance Sheet as at 31st December, 20X1, ₹ 1,150 had been written off on certain stock which was a poor selling line having the cost ₹ 3,450. A portion of these goods were sold in March, 20X2 at a loss of ₹ 125 on original cost of ₹ 1,725. The remainder of this stock was now estimated to be worth the original cost. Subject to the above exceptions, gross profit has remained at a uniform rate throughout. The stock salvaged was ₹ 2,900.

Show the amount of the claim of stock destroyed by fire. Memorandum Trading Account to be prepared for the period from 1-1-20X2 to 19-5-20X2 for normal and abnormal items.

Solution

Shri Garib Das

Trading Account for the year ended on 31st December, 20X1

		₹			₹	₹
To	Opening Stock	36,750	By	Sales A/c		2,43,500
To	Purchases	1,99,000	By	Closing Stock :		
To	Gross Profit (b.f.)	48,700		As valued	39,800	
				Add: Amount written off to restore stock to full cost	1,150	40,950
		2,84,450				2,84,450

The normal rate of gross profit to sales is = $\frac{48{,}700}{2{,}43{,}500}\times 100 = 20\%$

Memorandum Trading Account upto 19, May, 20X2

	Normal items ₹	***Abnormal items*** ₹	***Total*** ₹		***Normal*** ₹	***Abnormal items*** ₹	***Total items*** ₹
To Opening Stock	37,500	3,450*	40,950	By Sales	1,14,000	1,600	1,15,600
To Purchases	81,000	—	81,000	By Loss	—	125	125
To Gross				By Closing			

Profit (20% on ₹ 1,14,000)	22,800	—	22,800	Stock (bal. fig.)	27,300	1,725**	29,025
	1,41,300	3,450	1,44,750		1,41,300	3,450	1,44,750

* at cost, book value is ₹ 2,300.

** 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 19th May, 20X2	29,025
Less : Salvage	(2,900)
Loss of stock	26,125

Therefore, insurance claim will be for ₹ 26,125 only.

Illustration 7

On 30th March, 20X2 fire occurred in the premises of M/s Suraj Brothers. The concern had taken an insurance policy of ₹ 60,000 which was subject to the average clause. From the books of accounts, the following particulars are available relating to the period 1st January to 30th March 20X2.

(1) Stock as per Balance Sheet at 31st December, 20X1, ₹ 95,600.

(2) Purchases (including purchase of machinery costing ₹ 30,000) ₹ 1,70,000

(3) Wages (including wages ₹ 3,000 for installation of machinery) ₹ 50,000.

(4) Sales (including goods sold on approval basis amounting to ₹ 49,500) ₹ 2,75,000. No approval has been received in respect of 2/3rd of the goods sold on approval.

(5) The average rate of gross profit is 20% of sales.

(6) The value of the salvaged goods was ₹ 12,300.

You are required to compute the amount of the claim to be lodged to the insurance company.

Solution

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	50,300
Amount of claim = $\frac{\text{Insured value}}{\text{Total cost of stock on the date of fire}}$ x Loss of stock	48,211 (approx.)
$= \left(\frac{60,000}{62,600} \times 50,300\right)$	

A claim of ₹ 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 (₹)***	***Particulars***	***Amount (₹)***
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		
	3,31,000		3,31,000

* 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 ₹ 33,000 (i.e. 2/3 of ₹ 49,500) hence, these should be valued at cost i.e. ₹ 33,000 – 20% of ₹ 33,000 = ₹ 26,400.

3. Calculation of actual sales

Total sales – Sale of goods on approval ($2/3^{rd}$)= ₹ 2,75,000 – ₹ 33,000 = ₹ 2,42,000.

4. CLAIM FOR LOSS OF PROFIT

When a fire occurs, apart from the direct loss on account of stock or other assets destroyed, there is also a consequential loss because, for some time, the business is disorganized or has to be discontinued, and during that period, the standing expenses of the business like rent, salaries etc. continue. Moreover, there is loss of profits which the business would have earned during the period. *This loss can be insured against by a "Loss of Profit" or "Consequential Loss" policy*; there must be a separate policy in respect of the consequential loss but claim will be admitted in respect of the policy only when the claim on account of fire is also admitted under other policies.

The Loss of Profit Policy normally covers the following items:

(1) Loss of net profit

(2) Any increased cost of working, e.g., renting of temporary premises

In every business, there is some standard by which its activity or progress can be accurately judged: it may be sales affected or the quantity of goods (or services) produced. To measure the loss suffered by a firm due to fire, it is necessary to set up some standard expressed in such units to represents the volume of work. There should be a direct relation between the amount of standard and the amount of profit raised. A comparison between the amount of the standard before and after the fire will give a reliable indication of the loss of profit. The most satisfactory unit of measuring the prosperity (and therefore profits) is usually turnover:

A claim for loss of profits can be established only if :

(i) the insured's premises, or the property therein, are destroyed or damaged by the peril defined in the policy; and

(ii) the insured's business carried on the premises is interrupted or interfered with as a result of such damage.

A claim for loss of profits cannot arise if the claim for loss of property as a result of the fire is not admitted. It is possible that the business of the insured may suffer because of fire in the neighbourhood, not causing damage to the property of the insured, say by closing the street for some time. Such eventualities may be covered by agreement with the insurer on payment of extra premium. If fire does not affect the volume of business, there can be no claim for loss of profits.

Also, it does not mean that if there is a large property claim, there will be necessarily a large claim for loss of profit or vice versa.

4.1. Terms Defined

The following terms should be noted:

Gross Profit is the sum produced by adding to the Net Profit the amount of the Insured Standing Charges, or, if there be no Net profit, the amount of the Insured Standing Charges less such a proportion of any net trading loss as the amount of the Insured Standing Charges bears to all the standing charges of the business.

Net Profit is 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].

4.2. Conditions included in a Loss of Profit Insurance Policy

Insurance policies covering loss of profit contain the following conditions usually:

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 to which such adjustment shall be made as may be necessary to provide for the trend of the business and for variations in or special circumstances affecting the business either before or after the damage or which would have affected the business had the damage not occurred, so that the figures thus adjusted shall represent, as nearly as may be reasonably practicable the results which but for the damage would have been obtained during the relative period after damage.

Indemnity Period: The period beginning with the occurrence of the damage and ending not later than twelve months thereafter during which the results of the business shall be affected in consequence of the damage.

Memo 1: If during the indemnity period goods shall be sold or services shall be rendered elsewhere than at the premises for the benefit of the business either by the insured or by others on the Insured's behalf, the money paid or payable in respect of such sales or service shall be brought into account in arriving at the turnover during the indemnity period.

Memo 2: If any standing charges of the business be not insured by this policy then in computing the amount recoverable hereunder as increase in cost of workings only that proportion of the additional expenditure shall be brought into account which the sum of the Net Profit and the insured Standing Charges bear to the sum of the Net Profit and all standing charges.

Amount recoverable as increase in cost of workings = Additional expenditure x [(Net Profit + Insured Standing Charges)/ (Net Profit + All Standing Charges)]

Memo 3: This insurance does not cover loss occasioned by or happening through or in consequence of destruction of or damage to a dynamo motor, transformer, rectifier or any part of an electrical installation resulting from electric currents, however, arising.

The student should note the following:

(i) The word 'turnover' used above may be replaced by any other term denoting the basis for arriving at the loss of profit e.g., output.

(ii) Insured standing charges may include additional items, by agreement with the insurer.

(iii) Net profit means profit before income tax based on profit.

(iv) Depending upon the nature of business, the indemnity period may extend beyond 12 months (it may be as long as 6 years). Indemnity period shall not be confused with the period of insurance which cannot be more than one year.

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.

The amount payable as indemnity is the sum of (*a*) and (*b*) below :

(a) **In respect of reduction in turnover** : The sum produced by applying the rate of gross profit to the amount by which the turnover during the indemnity period shall, in consequence of the damage, falls short of the standard turnover, i.e., gross profit on short sales.

(b) **In respect of increase in cost of working** : The additional expenditure [subject to the provisions of Memo (2) given above] necessarily and reasonably incurred for the sole purpose of avoiding or diminishing the reduction in turnover which, but for that expenditure, would have taken place during the indemnity period in consequence of the damage. The amount allowable under this provision cannot exceed the sum produced by applying the rate of gross profit to the amount of reduction avoided by the additional expenditure, i.e., gross profit on (additional) sales generated by increased cost of workings.

The amount payable arrived at as above is reduced by any sum saved during the indemnity period in respect of such of the insured standard charges as may cease or be reduced in consequence of the damage.

Insurance policies provide that if the sum insured in respect of loss of profit is less than the sum produced by applying the rate of gross profit to the annual turnover (as adjusted by the trend of the business or variation in special circumstances affecting the business either before or after the damage or which would have affected the business had the damage not occurred), the amount payable by the insurer shall be proportionately reduced. This is nothing but application of the average clause.

The turnover of a business rarely remains constant and where there has been an upward or downward trend since the date of the last accounts and upto the date of the fire, the "standard turnover" should be appropriately adjusted, as per definition given above.

Similarly, where the earning capacity of the business has changed, the rate of gross profit may not represent a correct indication of the lots and mutually agreed rate may be used for the computation.

Students should carefully go through the working of the following illustration to understand the process of the computation of the claim made on a "Loss of Profit" policy. Suppose the following information is given:

(i) Indemnity period 13 months

(ii) Sum insured ₹ 2,00,000

(iii) Turnover, last financial year ended Dec. 31, 20X1 ₹ 12,00,000.

(iv) Gross Profit, i.e., Net profit plus insured standing charges, ₹ 2,00,000 giving a gross profit rate of 20%.

(v) Net profit plus all standing charges, ₹ 2,50,000 i.e., 50,000 of the standing charges are not insured.

(vi) Fire occurs on 31st March, 20X2, and affects business for 6 months.

(vii) Turnover for 12 months ended 31st March, 20X2, ₹ 11,70,000.

(viii)

Turnover: 1-4-20X1 to 30-9-20X1	5,00,000
1-4-20X2 to 30-9-20X2	3,00,000
Reduction in turnover	2,00,000

(ix) Sales amounting ₹ 1,60,000 generated in period 1.4.20X2 to 30.9.20X2 by incurring additional expenses of ₹ 30,000.

(x) Saving in insured charges in the indemnity period ₹ 10,000.

The claim in respect of profit will be calculated as follows:

(a) Short Sales:

	₹
Turnover 1-4-20X1 to 30-9-20X1	5,00,000
Less : Turnover 1-4-20X2 to 30-9-20X2	(3,00,000)
Reduction in turnover	2,00,000

Down-trend:	₹
Quarterly sales in 20X1 $\left[\frac{₹\ 12,00,000}{12}\times 3\right]$	3,00,000
Sales of first quarter in 20X2 : ₹ 11,70,000 - $\left[\frac{₹\ 12,00,000}{12}\times 9\right]$	2,70,000
(Jan-Mar 20X2)	30,000
Adjusted Annual Turnover :	₹
Sales for the period 1-4-20X1 to 31-12-20X1	
(11,70,000—2,70,000)	9,00,000
Add: Sales from 1-1-20X2 to 31-3-20X2	2,70,000
	11,70,000

(*b*)	Gross Claim: Gross Profit @ 20% on short sales (₹ 2,00,000)	40,000
	Add: Claim for increase in cost of working	24,718
		64,718
	Less: Saving in insured standing charges	(10,000)
		54,718

Claim for increased cost of working is subject to two tests

(*i*) $\text{Increased cost of working} \times \frac{\text{G.P. on Adjusted Annual Turnover}}{\text{G.P. as above} + \text{Uninsured Standing Charges}}$

$$= ₹\ 30,000 \times \frac{₹\ 11,70,000 \times \frac{20}{100}}{₹\ 11,70,000 \times \frac{20}{100} + ₹\ 50,000} = ₹\ 24,718.$$

(*ii*) Gross Profit on sales generated by increased cost of workings

$$= 1,60,000 \times \frac{20}{100} = ₹\ 32,000$$

Lower of the two, *i.e.*, ₹ 24,718 is allowable

(c)	Application of average clause :	₹
	Gross Profit on adjusted annual turnover, 20% on ₹ 11,70,000	2,34,000
	Sum insured	2,00,000
	Hence claim limited to $54,718 \times \frac{₹\,2,00,000}{₹\,2,34,000}$	46,768

Illustration 8

A fire occurred on 1st February, 20X2, in the premises of Pioneer Ltd., a retail store and business was partially disorganized upto 30th June, 20X2. 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 assuming entire sales during interrupted period was due to additional expenses.

	₹
Actual turnover from 1st February to 30th June, 20X2	*80,000*
Turnover from 1st February to 30th June, 20X1	*2,00,000*
Turnover from 1st February, 20X1 to 31st January, 20X2	*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.

Solution

Computation of the amount of claim for the loss of profit

Reduction in turnover	₹
Turnover from 1st Feb. 20X1 to 30th June, 20X1	2,00,000
Add: 15% expected increase	30,000
	2,30,000

Less: Actual Turnover from 1st Feb., 20X2 to 30th June, 20X2	(80,000)
Short Sales	1,50,000
Gross Profit on reduction in turnover @ 30% on ₹ 1,50,000 (see working note 1)	45,000

Add: Additional Expenses

Lower of

(i) Actual = ₹ 6,700

(ii) $$\text{Additional Exp. } x \frac{\text{G.P. on Adjusted Annual Turnover}}{\text{G.P. as above + Uninsured Standing Charges}}$$

$$6{,}700 \times \frac{1{,}55{,}250}{1{,}63{,}250} = 6{,}372$$

(iii) G.P. on sales generated by additional expenses

— 80,000 x 30% = 24,000

Therefore, lower of above is	6,372
	51,372
Less: Saving in Insured Standing Charges	(2,450)
Amount of claim before Application of Average Clause	48,922

Application of Average Clause:

$$\frac{\text{Amount of Policy}}{\text{G.P. on Annual Turnover}} \times \text{Amount of Claim}$$

$$= \frac{1{,}25{,}000}{1{,}55{,}250} \times 48{,}922 \qquad 39{,}390$$

Amount of claim under the policy = ₹ 39,390

Working Notes:

(*i*) Rate of Gross Profit for last Financial Year:

	₹
Gross Profit:	
Net Profit	70,000
Add: Insured Standing Charges	56,000
	1,26,000
Turnover for the last financial year	4,20,000

Rate of Gross Profit $= \frac{1,26,000}{4,20,000} \times 100 = 30\%$

(*ii*)	Annual Turnover (adjusted):	
	Turnover from 1st Feb., 20X1 to 31st January, 20X2	4,50,000
	Add: 15% expected increase	67,500
		5,17,500
	Gross Profit on ₹ 5,17,500 @ 30%	1,55,250
	Standing charges not Insured (64,000 – 56,000)	8,000
	Gross Profit *plus* non-insured standing charges	1,63,250

Illustration 9

The premises of XY Limited were partially destroyed by fire on 1st March, 20X2 and as a result, the business was practically disorganized upto 31st August, 20X2. The company is insured under a loss of profits policy for ₹ 1,65,000 having an indemnity period of 6 months.

From the following information, prepare a claim under the policy:

		₹
(i)	*Actual turnover during the period of dislocation (1-3-20X2 to 31-8-20X2)*	*80,000*
(ii)	*Turnover for the corresponding period (dislocation) in the 12 months immediately before the fire (1-3-20X1 to 31-8-20X1)*	*2,40,000*
(iii)	*Turnover for the 12 months immediately preceding the fire (1-3-20X1 to 28-2-20X2)*	*6,00,000*
(iv)	*Net profit for the last financial year*	*90,000*
(v)	*Insured standing charges for the last financial year*	*60,000*
(vi)	*Uninsured standing charges*	*5,000*
(vii)	*Turnover for the last financial year*	*5,00,000*

Due to substantial increase in trade, before and up to the time of the fire, it was agreed that an adjustment of 10% should be made in respect of the upward trend in turnover. The company incurred additional expenses amounting to ₹ 9,300 immediately after the fire and but for this expenditure, the turnover during the period of dislocation would have been only ₹ 55,000. There was also a saving *during the indemnity period of ₹ 2,700 in insured standing charges as a result of the fire.*

Solution

Computation of loss of profit Insurance claim

		₹
(1)	**Rate of gross profit:**	
	Net profit for the last financial year	90,000
	Add: Insured standing charges	60,000
		1,50,000
	Turnover for the last financial year	5,00,000
	Rate of gross profit = $\left[\frac{₹\ 1,50,000}{₹\ 5,00,000}\times 100\right]$ = 30%	
(2)	**Short sales:**	
	Standard Turnover	2,40,000
	Add: 10% increasing trend	24,000
		2,64,000
	Less: Turnover during the dislocation period (which is at par with the indemnity period of 6 months)	(80,000)
		1,84,000
(3)	**Annual (Adjusted) Turnover**:	
	Annual Turnover (1-3-20X1 to 23-2-20X2)	6,00,000
	Add: 10% increasing trend	60,000
		6,60,000

Note: Assumed that trend adjustment is required on total amount of annual turnover. However, part of the annual turnover represents trend adjusted figure. Alternatively, the students may ignore trend and take simply annual turnover. The claim would be ₹ 55,000 which is more than the claim computed in Para (5). So the Insurance Company would insist on trend adjusted on annual turnover.

		₹
(4)	**Additional Expenses:**	
	(i) Actual Expenses	9,300

(ii) Gross profit on sales generated by additional expenses

30/100× (₹ 80,000 – ₹ 55,000) 7,500

(iii) $$\frac{\text{Gross Profit on Annual (Adjusted) Turnover}}{\text{Gross Profit shown in the numerator + Uninsured standing charges}} \times \text{Additional Expenses}$$

$$\frac{30\% \text{ on ₹ } 6{,}60{,}000}{30\% \text{ on ₹ } 6{,}60{,}000 + \text{₹ } 5{,}000} \times \text{₹ } 9{,}300$$

$$\frac{\text{₹ } 1{,}98{,}000}{\text{₹ } 2{,}03{,}000} \times \text{₹ } 9{,}300 =$$ 9,071

Least of the above three figures, *i.e.* ₹ 7,500 allowable.

(5) **Claim:**

	₹
Loss of profit on short sales (30% on ₹ 1,84,000)	55,200
Add : Allowable additional expenses	7,500
	62,700
Less : Savings in insured standing charges	(2,700)
	60,000
Application of average clause	
$\left[\text{₹ } 60{,}000 \times \frac{\text{₹ } 1{,}65{,}000}{\text{₹ } 1{,}98{,}000}\right]$	50,000

Illustration 10

Sony Ltd.'s. Trading and profit and loss account for the year ended 31st December, 20X1 were as follows:

Trading and Profit and Loss Account for the year ended 31.12.20X1

		₹			₹
To	*Opening stock*	*20,000*	*By*	*Sales*	*10,00,000*
To	*Purchases*	*6,50,000*	*By*	*Closing stock*	*90,000*
To	*Manufacturing expenses*	*1,70,000*			
To	*Gross profit*	*2,50,000*			
		10,90,000			*10,90,000*
To	*Administrative expenses*	*80,000*	*By*	*Gross profit*	*2,50,000*

To	*Selling expenses*	*20,000*			
To	*Finance charges*	*1,00,000*			
To	*Net profit*	*50,000*			
		2,50,000			*2,50,000*

The company had taken out a fire policy for ₹ 3,00,000 and a loss of profits policy for ₹ 1,00,000 having an indemnity period of 6 months. A fire occurred on 1.4.20X2 at the premises and the entire stock were gutted with nil salvage value. The net quarter sales i.e. 1.4.20X2 to 30.6.20X2 was severely affected. The following are the other information:

Sales during the period	*1.1.X2 to 31.3.X2*	*2,50,000*
Purchases during the period	*1.1.X2 to 31.3.X2*	*3,00,000*
Manufacturing expenses	*1.1.X2 to 31.3.X2*	*70,000*
Sales during the period	*1.4.X2 to 30.6.X2*	*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.

Solution

Calculation of loss of stock:

Sony Ltd.

Trading A/c

for the period 1.1.20X2 to 31.3.20X2

	₹		₹
To Opening stock	90,000	By Sales	2,50,000
To Purchases	3,00,000	By Closing stock	2,60,000
To Manufacturing expenses	70,000	(balancing figure)	
To Gross profit (20%* of	50,000		

* *G.P. of 20X1*	*25%*	
Less: Decrease in trend	*5%*	*20%*

₹ 2,50,000) (W.N.3)			
	5,10,000		5,10,000
			₹
Stock destroyed by fire			2,60,000
Amount of fire policy			3,00,000

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

Computation of short sales:

	₹	
Average sales for the period 1.4.20X1 to 30.6.20X1 (W.N.1) (₹ 7,82,610/3)	2,60,870	
Add: Increasing trend of sales (15%)	39,130	(Approx.)
	3,00,000	
Less: Sales during the period 1.4.20X2 to 30.6.20X2	87,500	
Short sales	2,12,500	

Computation of G.P. Ratio:

$$\text{Gross profit ratio} = \frac{\text{Net profit} + \text{Insured standing charges}}{\text{Sales}} \times 100$$

$$= \frac{₹\ 50{,}000 + ₹\ 50{,}000}{₹\ 10{,}00{,}000} \times 100 = 10\%$$

Less: Decreasing trend in G. P. 5%

5%

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

Amount allowable in respect of additional expenses:

Least of the following:-

(i) Actual expenditure ₹ 60,000

(ii) G.P. on sales generated by

additional expenses 5% of ₹ 87,500 ₹ 4,375

(assumed that entire sales during disturbed period is due to additional expenses)

(iii) $\text{Additional Exp.} \times \dfrac{\text{G.P. on Adjusted Annual Turnover}}{\text{G.P. as above} + \text{Uninsured Standing Charges}}$

₹ 60,000 × $\dfrac{57,500}{57,500 + 1,30,000}$ = ₹ 18,400 (approx.)

least i.e. ₹ 4,375 is admissible.

G.P. on annual turnover:

Adjusted annual turnover:

	₹
Average turnover for the period 1.4.20X1 to 31.12.20X1 (W.N.1)	7,82,610
Turnover for the period 1.1.20X2 to 31.3.20X2	2,50,000
	10,32,610
Add: Increase in trend (15% of ₹ 7,82,610) (W.N.2)	1,17,390
	11,50,000
Gross profit on annual turnover (5% of ₹ 11,50,000)	57,500

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

Insurance claim to be submitted:

	₹
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 (₹80,000) and finance charges (₹ 1,00,000). Insured standing charges being ₹ 50,000, uninsured standing charges would be ₹ 1,30,000.

Working Note:

		₹
1.	**Break up of sales for the year 20X1:** Sales of the first quarter of 20X1	

	(₹ 2,50,000 x 100/115)	2,17,390* (approx.)
	Sales for the remaining three quarters of 20X1 ₹ (10,00,000-2,17,390)	7,82,610

* Sales for the first quarter of 20X1 is computed on the basis of sales of the first quarter of 20X2.

2. The increase in trend of sales has been applied to the sales of 20X1 only, as the sales figure of the first quarter of 20X2 was already trend adjusted.

3. Rate of gross profit in 20X1

= Gross profit/ Sales x 100 = 2,50,000/ 10,00,000 x 100 = 25%

In 20X2, gross profit had declined by 5% due to increased cost, hence, the rate of gross profit for loss of stock is taken at 20%.

Illustration 11

From the following particulars, you are required to calculate the amount of claim for Buildwell Ltd., whose business premises was partly destroyed by fire:

Sum insured (from 31st December 20X1)	*₹ 4,00,000*
Period of indemnity	*12 months*
Date of damage	*1st January, 20X2*
Date on which disruption of business ceased	*31st October, 20X2*

The subject matter of the policy was gross profit but only net profit and insured standing charges are included.

The books of account revealed:

(a) The gross profit for the financial year 20X1 was ₹ 3,60,000.

(b) The actual turnover for financial year 20X1 was ₹ 12,00,000 which was also the turnover in this case.

(c) The turnover for the period 1st January to 31st October, in the year preceding the loss, was ₹ 10,00,000.

During dislocation of the position, it was learnt that in November-December 20X1, there has been an upward trend in business done (compared with the figure of the previous years) and it was stated that had the loss not occurred, the trading results for 20X2 would have been better than those of the previous years.

The Insurance company official appointed to assess the loss accepted this view and adjustments were made to the pre-damaged figures to bring them up to the estimated amounts which would have resulted in 20X2.

The pre-damaged figures together with agreed adjustments were:

Period	***Pre-damaged figures***	***Adjustment to be added***	***Adjusted standard turnover***
	₹	₹	₹
January	*90,000*	*10,000*	*1,00,000*
Feb. to October	*9,10,000*	*50,000*	*9,60,000*
November to December	*2,00,000*	*10,000*	*2,10,000*
	12,00,000	*70,000*	*12,70,000*
Gross Profit	*3,60,000*	*46,400*	*4,06,400*

Rate of Gross Profit 30% (actual for 20X1), 32% (adjusted for 20X2).

Increased cost of working amounted to ₹ 1,80,000.

There was a clause in the policy relating to savings in insured standard charges during the indemnity period and this amounted to ₹ 28,000.

Standing Charges not covered by insurance amounted to ₹ 20,000 p.a. The annual turnover for January was nil and for the period February to October 20X2 ₹ 8,00,000

Solution

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

$\frac{₹\ 3,86,400}{₹\ 12,70,000}$ x 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 × 30.425% =2,43,400

(iii) $\frac{\text{Gross Profit on Annual Adjusted Turnover}}{\text{Gross Profit on Annual Adjusted Turnover} + \text{uninsured standing charges}}$ x Additional expenses

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

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

4. Amount of Claim

	₹
Gross profit on short sales = ₹ 2,60,000 x $\frac{30.425}{100}$	79,105
Add: Amount allowable in respect of additional expense	1,71,142
	2,50,247
Less: 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 ₹ 4,00,000 is higher than gross profit on annual adjusted turnover ₹ 3,86,400.

Therefore, insurance claim will be ₹ 2,22,247.

SUMMARY

1. Claim for Loss of Stock

- **Loss of Stock:**

  Amount of loss of stock is calculated as under:

  Value of stock on the date of fire XXXX

  Less :- Value of Salvaged stock XXXX

  Amount of loss of stock XXXX

- **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)

- **Other Points:**

  (i) Where stock records are maintained and not destroyed by fire, the value of the stock as at the date of the fire can be easily arrived at.

  (ii) Where stock records are not available or destroyed by the fire, the value of stock at the date of the fire has to be estimated.

  (iii) Where books of account are destroyed, the Trading Account has to be prepared.

  (iv) Insurance company makes payment for total loss (subject to sum insured and whether average clause applicable or not).

  (v) Salvaged stock can be made saleable after it is reconditioned. In that case, the cost of such stock must be credited to the Trading Account and debited to a salvaged stock account. The expenses on reconditioning must be debited and the sales credited to this account, the final balance being transferred to the Profit & Loss Account.

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) × 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

3. 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.
4. ***Amount of Indemnity Payable*:** Gross Profit Lost + Claim for increased cost of working Capital – Saving in Insured standing Charges.

TEST YOUR KNOWLEDGE

MCQs

1. Goods costing ₹ 1,00,000 were insured for ₹ 50,000. Out of these goods, ¾ are destroyed by fire. The amount of claim with average clause will be
   (a) ₹ 37,500.
   (b) ₹ 50,000.
   (c) ₹ 75,000.
2. Fire insurance claim will be limited to the
   (a) actual loss suffered even though the insured value of the goods may be higher.
   (b) proportion of the loss as the insured value bears to the total cost.
   (c) both (a) and (b)).
3. The Loss of Profit Policy normally covers the following items :
   (a) Loss of net profit and Standing charges.
   (b) Any increased cost of working *e.g.,* renting of temporary premises.
   (c) Both (a) and (b).
4. A plant worth ₹ 40,000 has been insured for ₹ 30,000, the loss on account of fire is ₹ 25,000. the insurance company will bear the loss to the extent of
   (a) ₹ 18,750.
   (b) ₹ 25,000.
   (c) ₹ 30,000.
5. If the policy is without average clause, a claim for loss of profit will be
   (a) Sum insured.
   (b) Higher of actual loss and sum insured.

(c) Lower of actual loss and sum insured

6. Standard turnover is

   (a) Turnover during the last 12 months immediately before damage.

   (b) Turnover during that period in 12 months immediately before damage which corresponds with indemnity period.

   (c) Turnover during the last accounting period immediately before damage.

7. Gross profit can be calculated as

   (a) Net profit +Insured standing charges.

   (b) Net profit - Insured standing charges.

   (c) Net profit + standing charges.

8. The cost of salvaged stock must be

   (a) Credited to trading account.

   (b) Debited to salvaged stock account.

   (c) Both (a) and (b).

Theoretical Questions

1. Explain the significance of 'Average Clause' in a fire insurance policy.

2. Define the following terms:

   (i) Indemnity Period;

   (ii) Standard Turnover

Practical Questions

Question 1

On 15th December, 20X1, a fire occurred in the premises of M/s. OM Exports. Most of the stocks were destroyed. Cost of stock salvaged being ₹ 1,40,000. From the books of account, the following particulars were available:

(i) Stock at the close of account on 31st March, 20X1 was valued at ₹ 9,40,000.

(ii) Purchases from 01-04-20X1 to 15-12-20X1 amounted to ₹ 13,20,000 and the sales during that period amounted to ₹ 20,25,000.

On the basis of his accounts for the past three years, it appears that average gross profit ratio is 20% on sales.

Compute the amount of the claim, if the stock were insured for ₹ 4,00,000.

Question 2

On 29th August, 20X2, the godown of a trader caught fire and a large part of the stock of goods was destroyed. However, goods costing ₹ 1,08,000 could be salvaged incurring fire fighting expenses amounting to ₹ 4,700.

The trader provides you the following additional information:

	₹
Cost of stock on 1st April, 20X1	7,10,500
Cost of stock on 31st March, 20X2	7,90,100
Purchases during the year ended 31st March, 20X2	56,79,600
Purchases from 1st April, 20X2 to the date of fire	33,10,700
Cost of goods distributed as samples for advertising from 1st April, 20X2 to the date of fire	41,000
Cost of goods withdrawn by trader for personal use from 1st April, 20X2 to the date of fire	2,000
Sales for the year ended 31st March, 20X2	80,00,000
Sales from 1st April, 20X2 to the date of fire	45,36,000

The insurance company also admitted firefighting expenses. The trader had taken the fire insurance policy for ₹ 9,00,000 with an average clause.

Calculate the amount of the claim that will be admitted by the insurance company.

Question 3

A fire occurred in the premises of M/s. Fireproof Co. on 31st August, 20X1. From the following particulars relating to the period from 1st April, 20X1 to 31st August, 20X1, you are requested to ascertain the amount of claim to be filed with the insurance company for the loss of stock. The concern had taken an insurance policy for ₹ 60,000 which is subject to an average clause.

		₹
(i)	Stock as per Balance Sheet at 31-03-20X1	99,000
(ii)	Purchases	1,70,000

(iii)	Wages (including wages for the installation of a machine ₹ 3,000)	50,000
(iv)	Sales	2,42,000
(v)	Sale value of goods drawn by partners	15,000
(vi)	Cost of goods sent to consignee on 16th August, 20X1, lying unsold with them	16,500
(vii)	Cost of goods distributed as free samples	1,500

While valuing the stock at 31st March, 20X1, ₹ 1,000 were written off in respect of a slow moving item. The cost of which was ₹ 5,000. A portion of these goods were sold at a loss of ₹ 500 on the original cost of ₹ 2,500. The remainder of the stock is now estimated to be worth the original cost. The value of goods salvaged was estimated at ₹ 20,000. The average rate of gross profit was 20% throughout.

Question 4

A fire occurred in the premises of M/s. Kailash & Co. on 30th September 20X1. From the following particulars relating to the period from 1st April 20X1 to 30th September 20X1, you are required to ascertain the amount of claim to be filed with the Insurance Company for the loss of Stock. The company has taken an Insurance policy for ₹ 75,000 which is subject to average clause. The value of goods salvaged was estimated at ₹ 27,000. The average rate of Gross Profit was 20% throughout the period.

	Particulars	**Amount in ₹**
(i)	Opening Stock	1,20,000
(ii)	Purchase made	2,40,000
(iii)	Wages paid (including wages for the installation of a machine ₹ 5,000)	75,000
(iv)	Sales	3,10,000
(v)	Goods taken by the Proprietor (Sale Value)	25,000
(vi)	Cost of goods sent to Consignee on 20th September 20X1, lying unsold with them	18,000
(vii)	Free Samples distributed -Cost	2,500

Question 5

On account of a fire on 15th June, 20X2 in the business house of a company, the working remained disturbed upto 15th December 20X2 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 the last year. The company incurred an additional expenditure of ₹ 12,000 to make sales possible and made a saving of ₹ 2,000 in the insured standing charges.

	₹
Actual sales from 15th June, 20X2 to 15th Dec, 20X2	70,000
Sales from 15th June 20X1 to 15th Dec 20X1	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 : 16th June 20X1 to 15th June 20X2	5,60,000

Question 6

Monalisa & Co. runs plastic goods shop. Following details are available from quarterly sales tax return filed.

Sales	20X1	20X2	20X3	20X4
	₹	₹	₹	₹
From 1st January to 31st March	1,80,000	1,70,000	2,05,950	1,62,000
From 1st April to 30th June	1,28,000	1,86,000	1,93,000	2,21,000
From 1st July to 30th September	1,53,000	2,10,000	2,31,000	1,75,000
From 1st October to 31st December	1,59,000	1,47,000	1,90,000	1,48,000
Total	6,20,000	7,13,000	8,19,950	7,06,000

Period	₹
Sales from 16-09-20X3 to 30-09-20X3	34,000
Sales from 16-09-20X4 to 30-09-20X4	Nil
Sales from 16-12-20X3 to 31-12-20X3	60,000

Sales from 16-12-20X4 to 31-12-20X4 20,000

A loss of profit policy was taken for ₹ 1,00,000. Fire occurred on 15th September, 20X4. Indemnity period was for 3 months. Net Profit was ₹ 1,20,000 and standing charges (all insured) amounted to ₹ 43,990 for year ending 31st December, 20X3.

Determine the Insurance Claim.

ANSWERS/ SOLUTIONS

MCQs

1. (a) **2.** (c) **3.** (c) **4.** (a) **5.** (c) **6.** (b) **7.** (a) **8.** (c)

Theoretical Questions

1. 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:

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

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

2. (i) **Indemnity period** is the period beginning with the occurrence of the damage and ending not later than twelve months.

(ii) **Standard Turnover** is the turnover during that period in the twelve months immediately before the date of damage which corresponds with the Indemnity Period.

Practical Questions

Answer 1

Memorandum Trading Account

For the period 01.04.20X1 to 15.12.20X1

Particulars	₹	**Particulars**	₹

To Opening stock	9,40,000	By Sales	20,25,000
To Purchases	13,20,000	By Closing Stock	6,40,000
To Gross Profit @20%	4,05,000	(Bal. figure)	
	26,65,000		26,65,000

Statement of Claim

	₹
Estimated value of Stock as at date of fire	6,40,000
Less: Value of Salvaged Stock	1,40,000
Estimated Value of Stock lost by fire	5,00,000

As the value of stock is more than insured value, amount of claim would be subject to average clause.

$$\text{Amount of Claim} = \frac{\text{Amount of Policy}}{\text{Value of Stock}} \times \text{Actual Loss of Stock}$$

$$\text{Amount of Claim} = \frac{4,00,000}{6,40,000} \times 5,00,000 = ₹\ 3,12,500$$

Answer 2

Memorandum Trading Account for the period 1st April, 20X2 to 29th August 20X2

		₹		₹
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		
		54,18,600		54,18,600

Statement of Insurance Claim

	₹
Value of stock destroyed by fire	8,82,600
Less: Salvaged Stock	(1,08,000)
Add: Fire Fighting Expenses	4,700
Insurance Claim	7,79,300

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

Working Note:

Trading Account for the year ended 31st March, 20X2

	₹		₹
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 (b.f.)	24,00,000		
	87,90,100		87,90,100

Rate of Gross Profit in 20X1-X2

$$\frac{\text{Gross Profit}}{\text{Sales}} \times 100 = \frac{24,00,000}{80,00,000} \times 100 = 30\%$$

Answer 3

Memorandum Trading Account for the period 1st April, 20X1 to 31st August, 20X1

	Normal Items ₹	*Abnormal Items* ₹	*Total* ₹		*Normal Items* ₹	*Abnormal Items* ₹	*Total* ₹
To Opening stock	95,000	5,000	1,00,000 *	By Sales	2,40,000	2,000	2,42,000
To Purchases (Refer W.N.)	1,56,500	-	1,56,500	By Goods sent to consignee	16,500	-	16,500**
To Wages (50,000 – 3,000)	47,000	-	47,000	By Loss	-	500	500
To Gross profit @ 20%	48,000	-	48,000	By Closing stock	90,000	2,500	92,500

...				(Bal.fig.)			
	3,46,500	5,000	3,51,500		3,46,500	5,000	3,51,500

* 99,000 + 1,000

** 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.

Statement of Claim for Loss of Stock

	₹
Book value of stock as on 31.08.20X1	92,500
Less: Stock salvaged	(20,000)
Loss of stock	72,500

Amount of claim to be lodged with insurance company

$$= \text{Loss of stock} \times \frac{\text{Policy value}}{\text{Value of stock on the date of fire}}$$

$$= ₹\ 72,500 \times \frac{60,000}{92,500} = ₹\ 47,027$$

Working Note:

Calculation of Adjusted Purchases

	₹
Purchases	1,70,000
Less: Drawings [15,000 – (20% x 15,000)]	(12,000)
Free samples	(1,500)
Adjusted purchases	1,56,500

Answer 4

Memorandum Trading Account for the period 1st April, 20X1 to 30th Sept. 20X1

		₹		₹
To Opening Stock		1,20,000	By Sales	3,10,000
To Purchases	2,40,000		By Consignment stock	18,000*
Less: Advertisement	(2,500)		By Closing Stock (Bal. fig.)	1,41,500

Cost of goods taken by proprietor	(20,000)	2,17,500		
To Wages (75,000 – 5,000)		70,000		
To Gross Profit [20% of Sales)		62,000		
		4,69,500		4,69,500

* 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.

Statement of Insurance Claim

	₹
Value of stock destroyed by fire	1,41,500
Less: Salvaged Stock	(27,000)
Insurance Claim	1,14,500

Note: Since policy amount is less than claim amount, average clause will apply. Therefore, claim amount will be computed by applying the formula

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

Claim amount = ₹ 60,689 (1,14,500 x 75,000/ 1,41,500)

Answer 5

(1) Calculation of short sales:

	₹
Sales for the period 15.6.20X1 to 15.12.20X1	2,40,000
Add: 25% increase in sales	60,000
Estimated sales in current year	3,00,000
Less: Actual sales from 15.6.20X2 to 15.12.20X2	(70,000)
Short sales	2,30,000

(2) Calculation of gross profit:

$$\text{Gross profit} = \frac{\text{Net profit + Insured standing charges}}{\text{Turnover}} \times 100$$

$$= \frac{₹\ 80,000 + ₹\ 70,000}{₹\ 6,00,000} \times 100$$

$$= \frac{₹\ 1,50,000}{₹\ 6,00,000} \times 100$$

= 25%

(3) Calculation of loss of profit:

₹ 2,30,000 x 25% = ₹ 57,500

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

Least of the following:

(i) Actual expense = ₹ 12,000

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

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

Where,

Adjusted turnover	₹
Turnover from 16.06.20X1 to 15.06.20X2	5,60,000
Add: 25% increase	1,40,000
	7,00,000

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

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

(5) Calculation of total loss of profit

	₹
Loss of profit	57,500
Add: Increased cost of working	9,333

...	66,833
Less: Saving in insured standing charges	(2,000)
	64,833

(6) Calculation of insurable amount:

Adjusted turnover x G.P. rate

= ₹ 7,00,000 x 25% = ₹ 1,75,000

(7) Total claim for consequential loss of profit:

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

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

Answer 6

(1) Gross profit ratio

	₹
Net profit in year 20X3	1,20,000
Add: Insured standing charges	43,990
Gross profit	1,63,990

$$\text{Ratio of gross profit} = \frac{1,63,990}{8,19,950} = 20\%$$

(2) Calculation of Short sales

Indemnity period: 16.9.20X4 to 15.12.X4

Standard sales to be calculated on basis of corresponding period of year 20X3

	₹
Sales for period 16.9.20X3 to 30.9.X3	34,000
Sales for period 1.10.20X3 to 15.12.20X3 (Note 1)	1,30,000
Sales for period 16.9.20X3 to 15.12.20X3	1,64,000
Add: upward trend in sales (15%) (Note 2)	24,600
Standard Sales (adjusted)	1,88,600

Actual sales of disorganized period

Calculation of sales from 16.9.X4 to 15.12.X4

...

...	Sales for period 16.9.X4 to 30.9.X4	Nil
	Sales for 1.10.X4 to 15.12.X4 (₹ 1,48,000 – ₹ 20,000)	1,28,000
	Actual Sales	1,28,000
	Short Sales (₹ 1,88,600 - ₹ 1,28,000)	60,600

(3) **Loss of gross profit**

Short sales x gross profit ratio = 60,600 x 20% 12,120

(4) **Application of average clause**

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

$$= 12{,}120 \times \frac{1{,}00{,}000}{1{,}63{,}120\ (\text{W.N.3})}$$

Amount of claim = ₹ 7,430

Working Notes:

1. **Sales for period 1.10.X3 to 15.12.X3**

	₹
Sales for 1.10.X3 to 31.12.X3 (given)	1,90,000
Sales for 16.12.X3 to 31.12.X3 (given)	60,000
Sales for period 1.10.X3 to 15.12.X3	1,30,000

2. **Calculation of upward trend in sales**

Total sales in year 20X1 = ₹ 6,20,000

Increase in sales in year 20X2 as compared to 20X1 = ₹ 93,000

$$\% \text{ increase} = \frac{93{,}000\ (7{,}13{,}000 - 6{,}20{,}000)}{6{,}20{,}000} = 15\%$$

Increase in sales in year 20X3 as compared to year 20X2

$$\% \text{ increase} = \frac{1{,}06{,}950\ (8{,}19{,}950 - 7{,}13{,}000)}{7{,}13{,}000} = 15\%$$

Thus annual percentage increase trend is of 15%.

3. **Gross profit on annual turnover**

	₹
Sales from 16.9.X3 to 30.9.X3(adjusted)(34,000 x1.15)	39,100
1.10.X3 to 31.12.X3(adjusted)(1,90,000 x1.15)	2,18,500

1.1.X4 to 31.3.X4	1,62,000
1.4.X4 to 30.6.X4	2,21,000
1.7.20X4 to 15.9.20X4 (1,75,000 – Nil)	1,75,000
Sales for 12 months just before date of fire	8,15,600
Gross profit on adjusted annual sales @ 20%	1,63,120