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

ASSIGNMENT SOLUTIONS

PROBLEM NO:1

In the books of M/S Kailash

Memorandum Trading Account from 1-4-2013 to 30-9-2013

Particulars		Amount Rs.	Particulars		Amount Rs.
To Opening Stock		1,20,000	By sales A/c		3,10,000
To purchases A/c (WN 1)		2,17,500	By Goods sent on consignment A/c		18,000*
To wages A/c	75,000				
Less: wages for Installation of a machine	(5,000)	70,000	By closing stock (Bal.fig)		1,41,500
To gross profit (3,10,000 x 20%)		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 CLAIM:

Stock as on date of fire = 1,41,500

(-) Salvaged stock = (27,000)

Actual loss of stock = 1,14,500

$$\text{claim} = \frac{\text{Actual loss of stock}}{\text{stockon date of fire}} \text{x policy amount} = \frac{1{,}14{,}500}{1{,}41{,}500} \text{x} 75{,}000 = \text{Rs.}60{,}689$$

Note: The Stock on date of fire i.e. Rs.1,41,500 is more than policy amount. i.e. Rs.75,000.so, it is a case of under-insurance. Hence Average Clause is applicable.

WORKING NOTES: 1

Particulars	Amount (Rs.)
Purchases	2,40,000
Less: Goods taken for personal use at cost [25,000 - 20%]	(20,000)
Less: Free samples distributed at cost	(2,500)
Net amount of purchases	**2,17,500**

PROBLEM NO: 2

In the books of Mr. Black

Dr. Trading Account for the year ended 31-3-2014 Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To opening stock A/c	1,35,000	By sales A/c	9,00,000
To purchases A/c	6,45,000	By closing Stock A/c $\left[1{,}62{,}000 \text{x} \frac{100}{90}\right]$	1,80,000
To Gross profit (Bal.fig)	3,00,000		
	10,80,000		**10,80,000**

$$\%\text{ of GP} \left[\frac{\text{GP}}{\text{sales}} \text{x} 100\right] = \frac{3{,}00{,}000}{9{,}00{,}000} \text{x} 100 = 33.33333\%(\text{or})1/3$$

Memorandum Trading Account from 01 - 04 - 2014 to 02 - 06 - 2014

Particulars		Amount (Rs.)	Particulars		Amount (Rs.)
To opening stock		1,80,000	By sales A/c	4,80,000	
To purchases A/c	2,25,000		**(-)** Goods not dispatched	(75,000)	4,05,000
(-) machinery purchases	(15,000)				
(+) unrecorded purchases	30,000	2,40,000	By closing stock (Bal. fig)		1,50,000
To Gross Profit 4,05,000 x 1/3		1,35,000			
		5,55,000			**5,55,000**

STATEMENT OF CLAIM:

Stock on date of fire = 1,50,000

(-) Salvaged stock -

Actual Loss of stock = 1,50,000

$$\text{Claim} = \frac{\text{Actual loss of stock}}{\text{Stock on date of fire}} \times \text{policy Amount} = \frac{1,50,000}{1,50,000} \times 1,20,000 = \text{Rs.}1,20,000$$

Note: The stock on date of fire i.e. Rs.1,50,000 is more than policy amount i.e., Rs.1,20,000 so, it is a case of under - insurance, Hence average clause is applicable

PROBLEM NO: 3

In the books of Jay Associates

Memorandum Trading Account from 01 - 04 - 2011 to 30 - 06 - 2011

Particulars	Normal item	Abnormal item	Total	Particulars	Normal item	Abnormal item	Total
To Opening stock	2,00,000	20,000	2,20,000	By sales A/c **Less:** returns [30,20,000 - 3,00,000]	27,00,000	20,000	27,20,000
To purchases A/c	21,00,000	-	21,00,000	By closing stock (Bal . fig)	5,00,000	-	5,00,000
To Gross Profit [27,00,000 x 1/3]	9,00,000	-	9,00,000				
	32,00,000	**20,000**	**32,20,000**		**32,00,000**	**20,000**	**32,20,000**

STATEMENT OF CLAIM:

Stock on date of fire = 5,00,000

Less: Salvaged stock = (30,000)

Add: Fire Fighting Exp. = 30,000

Actual Loss = 5,00,000

$$\text{Claim} = \frac{\text{Actual Loss}}{\text{Stock on date of fire}} \times \text{policy} = \frac{5,00,000}{5,00,000} \times 3,50,000 = \text{Rs. } 3,50,000$$

Note: The Stock on date of fire i.e. 5,00,000 is more than policy amount, so it is a case of under insurance, hence average clause is applicable.

PROBLEM NO: 4

Dr. In the books of Agni Ltd Trading Account for the year ended 31-03-10 Cr.

Particulars	Amount Rs.	Particulars	Amount Rs.
To opening stock	9,62,200	By sales A/c	52,00,000
To purchases A/c	45,25,000	By closing stock	13,27,200
To gross profit (bal. fig)	10,40,000		
	65,27,200		**65,27,200**

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

Memorandum Trading Account from 01 - 04 - 2010 to 22 - 01 - 2011

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

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

Working Note:

Cash sales defalcated by the Accountant:

Defalcation period = 1.4.2010 to 18.8.2010 = 140 days

Since, 140 days / 7 weeks = 20 weeks

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

STATEMENT OF CLAIM:

Stock on date of fire = 7,44,100

Less: salvaged stock actual loss of stock = -

7,44,100

Claim to be lodged with insurance company = 7,44,100.

PROBLEM NO: 5

Shri Ramesh

Dr. Trading Account for 2014 (to determine the rate of gross profit) Cr.

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

The (normal) rate of gross profit to sales is $= \frac{97,400}{4,87,000} \times 100 = 20\%$

Memorandum Trading Account up to 31 - 03 - 2015

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

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

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

Calculation of Insurance Claim

Value of Stock on March 31, 2015 58,050

Less: Salvage (5,800)

Loss of stock 52,250

Claim subject to average clause: $\frac{\text{Amount of policy}}{\text{Value of stock}} \times \text{Actual loss of stock} = \frac{5,00,000}{58,050} \times 52,250 = 45,004$

PROBLEM NO: 6

1. **Calculation of short sales:**

	Amount
Sales for the period 15.6.2010 to 15.12.2010	240,000
Add: 25% increase in sales	60,000
Estimated sales in current year	300,000
Less: Actual sales from 15.6.2011 to 15.12.2011	(70,000)
Short sales	2,70,000

2. **Calculation of gross profit:**

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

$$\frac{80{,}000 + 70{,}000}{6{,}00{,}000} \times 100 = \frac{1{,}50{,}000}{6{,}00{,}000} \times 100 = 25\%$$

3. **Calculation of loss of profit:** Rs. 2,30,000 x 25% = Rs.57,500

4. **Calculation of claim for increased cost of working:**

Least of the following:

i) Actual expense= Rs. 12,000

ii) $\text{Expenditure} \times \dfrac{\text{Gross profit on adjusted turnoer}}{\text{Gross profit as above} + \text{uninsured standing charges}}$

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

Where,

Adjusted turnover	**Rs.**
Turnover from 16.06.2010 to15.06.2011	5,60,000
Add: 25% increase	1,40,000
	7,00,000

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

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

5. **Calculation of total loss of profit**

	Amount
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 = Rs. 7,00,000 x 25% = Rs. 1,75,000

7. **Total claim for consequential loss of profit:**

$$= \frac{\text{Insured amount}}{\text{Insurable amount}} \times \text{Total loss of profit} = \frac{1{,}40{,}000}{1{,}75{,}000} \times 64{,}833 = 51{,}866.40$$

PROBLEM NO: 7

(1) Rate of gross profit

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

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

Add: Adjustment for increase in gross profit rate 2%

20%

(2) Calculation of short sales:

Particulars	Amount
Turnover from 1.9.2009 to 1.3.2010	7,50,000
Add: Adjustment for increase in turnover @ 10%	75,000
Adjusted turnover	8,25,000
Less: Actual turnover from 1.9.2010 to 1.3.2011	2,25,000
Short sales	600,000

(3) Additional expenses:

Particulars	Amount
i) Actual expenses	40,000
ii) Gross profit on sale generated by additional expenses [(20/100)x1,00,000]	20,000

$$= \frac{\text{Additional Exp x GP on AAT}}{\text{GP on AAT} + \text{uninsured sanding charges}} = 40,000 \times \frac{20\% \text{ on } 24,20,000}{20\% \text{ on } 24,20,000 + 20,000}$$

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

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

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

(4) Amount of claim before application of average clause

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

(5) Application of average clause

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

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

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

PROBLEM NO: 8

LOSS OF STOCK

Note: Given that due to rise in wages the applicable rate of GP is 28% [30%-2%]

In the books of S & M ltd

Memorandum Trading Account from 01 - 01 - 2015 to 30 - 04 - 2015

Particulars	Amount Rs.	Particulars	Amount Rs.
To Opening Stock	70,000	By Sales	2,40,000
To Purchases	1,00,000		
To Wages	50,000	By Closing Stock (Bal. Fig)	83,200
To Mfg. Exp	36,000		
To GP [2,40,000 x 28%]	67,200		
	3,23,200		**3,23,200**

STATEMENT OF CLAIM:

Stock on date of fire	= 83,200
Less: salvaged stock	= -
Actual loss of stock	= 83,200

$$\text{Claim} = \frac{\text{Actual loss of stock}}{\text{Stock on date of fire}} \text{x Policy amount} = \frac{83{,}200}{83{,}200} = 80000 = 80{,}000$$

Note: The Stock on date of fire i.e. 83,200 is more than policy amount i.e., 80,000 so it is a case of under - insurance hence average clause is applicable

Computation of GP% = $\frac{\text{Gross profit}}{\text{Sales}} \text{x}100 = \frac{2{,}40{,}000}{8{,}00{,}000} \text{x}100 = 30\%$

Loss of profit

Standard turnover [01-05-14 To 31-08-14]	= xxx
(+/-)% downward/Downward trend	= xxx
Adj. Standard turnover (AST)	= xxx
(-) Actual Turnover [01-05-15 To 31-08-15]	= xxx
Short Sales	= xxx

Step 1: $\text{GP\%}\left[\frac{\text{Adj NP}}{\text{last year T.O}} \text{x}100\right]$

NP for last year	= 56,000
Add: Insured Standing Charges	= 1,20,000
Adj. NP	= 1,76,000

$$\text{GP\%} = \frac{1{,}76{,}000}{8{,}00{,}000} \text{x}100 = 22\%$$

Note: Due to rise in wages, applicable rate of GP during 2015 is 20% [22% - 2%]

Step 2: Short Sales:

Standard turnover [01-05-14 To 31-08-14]	= 3,60,000
Less: 20% downward trend in turnover (WN-1)	= (72,000)
AST	= 2,88,000
Less: Actual Turn over [01-05-15 To 31-08-15]	= (60,000)
Short Sales	= 2,28,000

Step 3: Loss of profit [short sales x GP%]: 2,28,000 x 20% = 45,600

Step 4: Adjusted annual turnover:

Turn over from 01-01-14 To 31-12-14	= 8,00,000
Less: T.O from 01-01-14 To 30-04-14	= 3,00,000
T.O from 01-05-14 To 31-12-14 (8 months)	= 5,00,000
Add: T.O from 0-01-15 To 30-04-15 [4 months]	= 2,40,000
	= 7,40,000
Less: 20 % downward trend [5,00,000 x 20%]	= 1,00,000
AAT	= 6,40,000

Step 5: Gross profit on Adjusted annual turnover [GP on AAT]

AAT x GP% (6,40,000 x 20%)	= 1,28,000

Step 6: Admissible Additional Expenses

a) Actual Additional Expenses incurred = 140,000

b) Proportionate Additional Exp

$$=\frac{\text{Additional exp x GP on AAT}}{\text{GP on AAT}+\text{uninsured standing charges}}=\frac{1{,}40{,}000 \text{ x } 1{,}28{,}000}{1{,}28{,}000+20{,}000}=1{,}21{,}081$$

c) GP on Sales generated by additional Expenses [on additional turnover] 60,000 x 20% = 12,000

Step 7: Gross claim

Loss of profit	= 45,600
Add: Admissible Additional Expenses	= 12,000
Less: Savings in standing charges	= -
	= **57,600**

Step 8: Since GP on AAT i.e., 1,28,000 is less than policy amount, it is not a case of under – insurance, hence average clause is not applicable

Net claim = Rs.57,600

Assumption: It is assumed that sales during dislocation period wholly are due to additional expenses.

WORKING NOTES:

Computation of upward/Downward Trend in turnover

Turn over from 01-01-14 to 30-04-14	= 3,00,000
Turn over from 01-01-15 To 30-04-15	= 2,40,000
Decrease	= 60,000

% of Decrease $=\frac{60{,}000}{3{,}00{,}000}\text{x}100=20\%$

PROBLEM NO: 9

i) Calculation of % of Gross Profit

$$\%\text{ of GrossProfit}=\frac{\text{Net profit}+\text{Standing Charges}}{\text{Last Year Turnover}}\text{x}100=\left[(67{,}500+1{,}14{,}750)/6{,}75{,}000\right]\text{x}100=27\%$$

ii) Calculation of policy amount to cover loss of profit

Particulars	Amount Rs.
Turnover in the last financial year	6,75,000
Add: 30% increase in turnover	2,02,500
	8,77,500
Gross profit on increased turnover (8,77,500 x 27%)	2,36,925
Add: Additional standing charges*	42,500
Policy Amount	**2,79,425**

$\therefore$ The trader should go in for a loss of profit policy of Rs.2,79,425

*Additional expenditure of Rs. 42,500 has been considered as standing charges and hence included in the policy amount.

PROBLEM NO: 10

In the books of M/s. Platinum Jewellers

Insurance policy to be taken

Particulars	Amount Rs.	Amount Rs.
Turnover of previous year		30,50,000
Add: Increase in sales by 25%		7,62,500
Sales for Current Year		38,12,500
Less: Cost of materials (18,60,000 + 25% increase)		(23,25,000)

		14,87,500
Less: Wages of Skilled Craftsmen(1,60,000 + 20% increase)		(1,92,000)
Gross Profit for Current Year		12,95,500
Add: Increased standing charges:		
Interest on overdraft (2,00,000 x 12%)	24,000	
Salaries (2,80,000 x 10%)	28,000	52,000
Policy to be taken for current year 2015		**13,47,500**

WORKING NOTE:

Calculation of Sales

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

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

THE END