

# Class: Working Capital - Inventory

## Mini Session 1: EOQ

### ILLUSTRATION 1

Forecast Demand pa	400,000
Order cost	40
Holding cost	3.33

### ILLUSTRATION 2

Forecast Demand pa	100,000
Order cost	10
Holding cost	0.83

ILLUSTRATION 3

Forecast Demand pa	20,000
Order cost	2
Holding cost	0.17

**Mini Session 2: EOQ (with Buffer Stock)**

## ILLUSTRATION 1

Forecast Demand pa	10000
Current Order amount	10%
Order cost	25
Holding cost	0.32
Buffer Inventory	312.5

## ILLUSTRATION 2

Forecast Demand pa	100000
Current Order amount	8%
Order cost	250
Holding cost	3.2
Buffer Inventory	3125

## ILLUSTRATION 3

Forecast Demand pa	75000
Current Order amount	12%
Order cost	187.5
Holding cost	2.4
Buffer Inventory	2344

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Exam Question

December 10 Q3a

**Mini Session 3: EOQ (with Bulk Purchase Discount)**

## ILLUSTRATION 1

Forecast Demand per year	400,000
Cost of Materials	80
Order cost	40
Holding cost	3.33
<b><u>Bulk Purchase Offer</u></b>	
Bulk Purchase Level	10,000
Bulk Purchase Discount	1%
New Holding Cost	13.33

## ILLUSTRATION 2

Forecast Demand pa	100,000
Cost of Materials	20
Order cost	10
Holding cost	0.83
<b><u>Bulk Purchase Offer</u></b>	
Bulk Purchase Level	10,000
Bulk Purchase Discount	0.01
New Holding Cost	3.33

## ILLUSTRATION 3

Forecast Demand pa	90,000
Cost of Materials	18
Order cost	9
Holding cost	0.75
<b><u>Bulk Purchase Offer</u></b>	
Bulk Purchase Level	10,000
Bulk Purchase Discount	1%
New Holding Cost	3.00

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Exam Question

June 08 Q3d ii

# Class: Working Capital - Receivables

## Mini Session 1: Receivables (with Early Settlement Discount)

### ILLUSTRATION 1

Annual Sales Revenue	6,000,000
Credit days offered	30
Actual credit taken	40
Contribution to Sales ratio	60%
Overdraft	7%
Early Settlement discount	1.5%
If pay within (days)	15
Increased Sales	5%
Increased Costs (as % of turnover)	0.5%
Amount taking the discount	30%
Remainder actual credit days	60



## ILLUSTRATION 2

Annual Sales Revenue	12,000,000
Credit days offered	40
Actual credit taken	50
Contribution to Sales ratio	40%
Overdraft	10%
Early Settlement discount	1%
If pay within (days)	10
Increased Sales	5%
Increased Costs (as % of turnover)	1%
Amount taking the discount	40%
Remainder actual credit days	70

## ILLUSTRATION 3

Annual Sales Revenue	4,000,000
Credit days offered	20
Actual credit taken	30
Contribution to Sales ratio	50%
Overdraft	10%
Early Settlement discount	2%
If pay within (days)	10
Increased Sales	4%
Increased Costs (as % of turnover)	1.5%
Amount taking the discount	40%
Remainder actual credit days	50

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**Exam Question**

December 12 - 2a

Pilot 2007 - 3a

December 10 - 3c

**Mini Session 2: Receivables (with Factor - non-recourse)**

## ILLUSTRATION 1

<b>Current Position</b>	
Sales	100,000
Receivables	10,000
Overdraft	8%
<b>Factor Offer</b>	
Annual fee (of credit sales)	1%
Receivables days under factor	10
Admin Savings	80
Bad debts savings	100
Advance (% of trade receivables)	80%
Advance fee	9%

## ILLUSTRATION 2

<b>Current Position</b>	
Sales	400,000
Receivables	50,000
Overdraft	7%
<b>Factor Offer</b>	
Annual fee (of credit sales)	0.5%
Receivables days under factor	20
Admin Savings	100
Bad debts savings	100
Advance (% of trade receivables)	80%
Advance fee	8%

## ILLUSTRATION 3

<b>Current Position</b>	
Sales	360,000
Receivables	30,000
Overdraft	7%
<b>Factor Offer</b>	
Annual fee (of credit sales)	0.5%
Receivables days under factor	15
Admin Savings	100
Bad debts savings	200
Advance (% of trade receivables)	75%
Advance fee	8%

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**Mini Session 3: Receivables (with Factor - with-recourse)**

## ILLUSTRATION 1

<b>Current Position</b>	
Sales	36,000
Receivables	4,000
Bad debts (% of turnover)	1%
Overdraft	6%
<b>Factor Offer</b>	
Annual fee (of credit sales)	1%
Receivables days under factor	20
Admin Savings	35
Bad debts (% of turnover)	0.5%
Advance (% of trade receivables)	80%
Advance fee	7%

## ILLUSTRATION 2

<b>Current Position</b>	
Sales	100,000
Receivables	10,000
Bad debts (% of turnover)	1%
Overdraft	8%
<b>Factor Offer</b>	
Annual fee (of credit sales)	0.5%
Receivables days under factor	20
Admin Savings	35
Bad debts (% of turnover)	1%
Advance (% of trade receivables)	80%
Advance fee	9%

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**Exam Question**

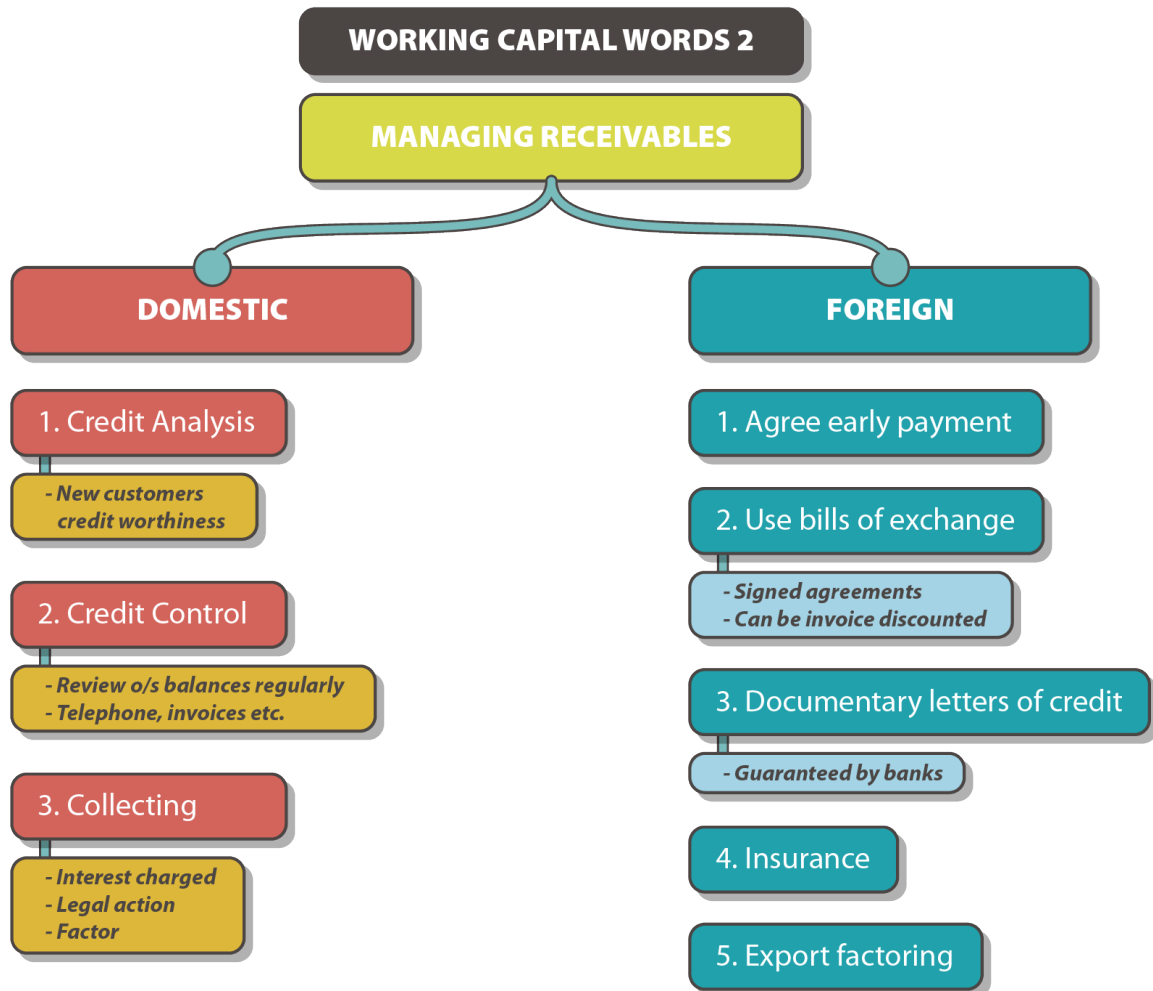
December 11 - 2c

December 08 - 2c

## Mini Session 4: Managing Receivables

### Exam Questions

June 10 - 1b  
 December 12 - 2d  
 June 13 - 3b



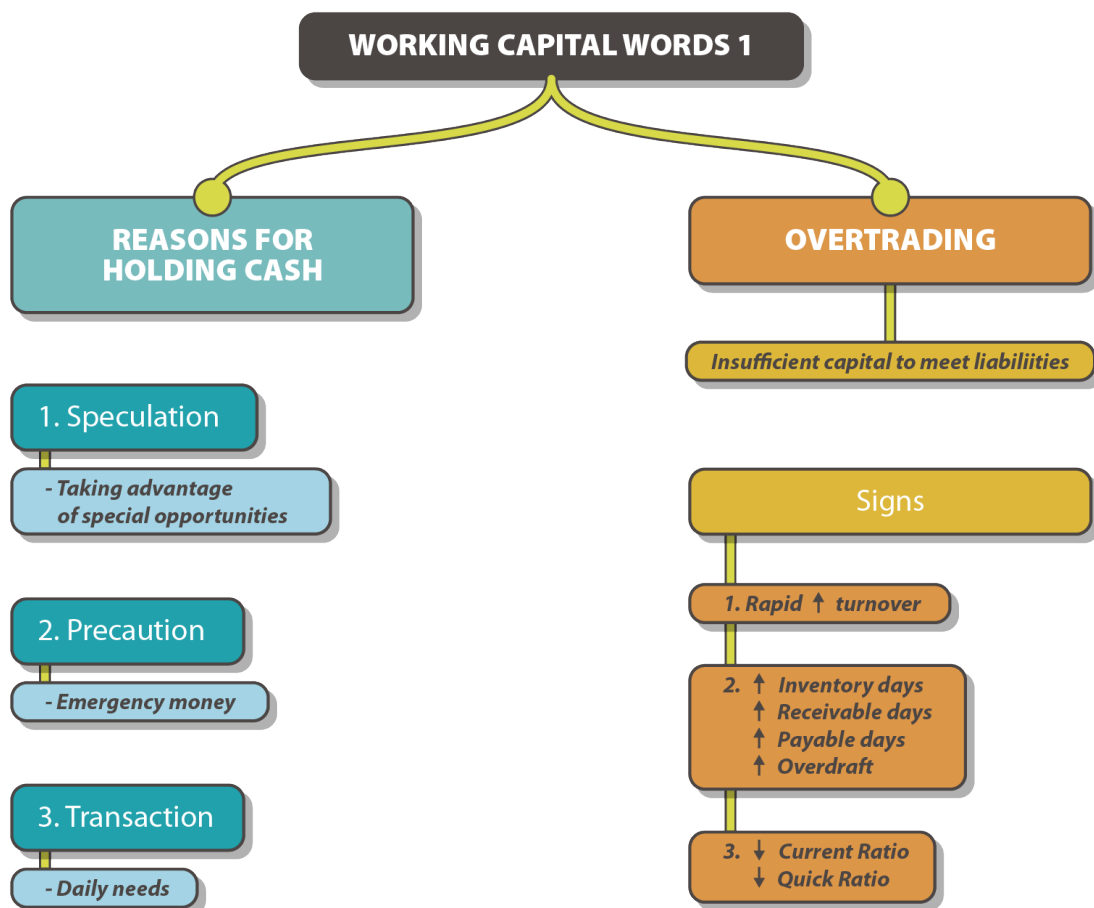


# Class: Working Capital - Cash

## Mini Session 1: Reasons for Holding Cash & Overtrading

Exam Questions

December 12 - 2c



# Class: Working Capital - Cash

## Mini Session 2: Baumol Model

### ILLUSTRATION 1

Annual transactions	240,000
Switching cost	30
Bank Deposit Account	5%

### ILLUSTRATION 2

Annual transactions	100,000
Switching cost	12.5
Bank Deposit Account	2%

### ILLUSTRATION 3

Annual transactions	180,000
Selling shares cost	22.5
Investment return	4%

**Mini Session 3: Miller-Orr Model**

## ILLUSTRATION 1

Minimum cash balance	\$4,000
Cost of depositing / selling investments	\$12
Standard Deviation	\$600
Interest rate on Investments	6%

## ILLUSTRATION 2

Minimum cash balance	\$10,000
Cost of depositing / selling investments	\$20
Standard Deviation	\$800
Interest rate on Investments	4%

## ILLUSTRATION 3

Minimum cash balance	\$8,000
Cost of depositing / selling investments	\$24
Standard Deviation	\$900
Interest rate on Investments	7%

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### Exam Questions

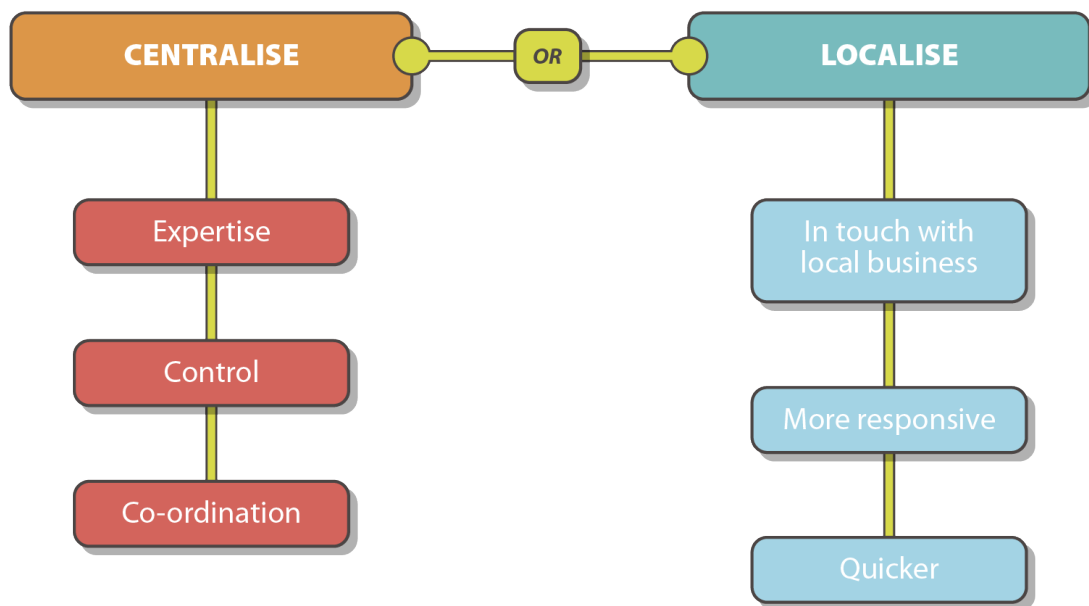
June 12 - 2c

Pilot 2007 - 3b

## Mini Session 4: Treasury Management

### WORKING CAPITAL WORDS 3

### TREASURY MANAGEMENT



# Class: Working Capital - Cash

## Mini Session 5: Forecasting

Non current Assets			100,000
Inventory	16,667		
Receivables	<u>17,921</u>	34,588	
Overdraft	7,758		
Payables	<u>20,833</u>	28,591	
<b>Cashflow forecast</b>	<b>Month</b>	<b>Month</b>	<b>Month</b>
	<b>1</b>	<b>2</b>	<b>3</b>
Cash operating receipts	5,000	5,150	4,508
Cash operating payments	4,682	4,854	4,440
6m interest on traded bonds		237	
Capital investment			2,368
<b>Further Info</b>			
Credit Sales	100,634		
Cost of sales	76,035		
Overdraft limit	8,169		
Overdraft rate (%)	12.60		
<b>PROPOSAL</b>			
Reduce receivable days to	53		
This would take 6 months (equal reduction per month)			
Inventory days reduction per month (days)	2		

Calculate the bank balance:

- 1) In three months' time if no action is taken; and
- 2) If proposals are implemented.

## Exam Questions

June 09 - 3b

# Class: Working Capital - Payables

## Mini Session 1: Payables with early settlement discounts

### ILLUSTRATION 1

Annual Payments	1,000,000
Credit days offered	30
Overdraft	10%
Early Settlement discount	2%
If pay within (days)	10

### ILLUSTRATION 2

Annual Payments	460,000
Credit days offered	40
Overdraft	10%
Early Settlement discount	1.5%
If pay within (days)	10



# Class: Investment Appraisal

## Mini Session 1: ROCE / ARR

### ILLUSTRATION 1

Cost of Investment	1,000,000				
Scrap Value	120,000				
UEL of Project (Years)	4				
Year	1	2	3	4	
Units sold	30	36	45	40	
Selling Price	12598				
Variable Cost	5039				
Selling Price inflation	5%				
Variable cost inflation	4%				
Fixed Costs (annual)	1386				
Fixed costs inflation	5%				
Discount rate	10%				

## ILLUSTRATION 2

Cost of Investment	500,000				
Scrap Value	60,000				
UEL of Project (Years)	4				
Year	1	2	3	4	
Units sold	20	24	30	27	
Selling Price	9449				
Variable Cost	3779				
Selling Price inflation	2%				
Variable cost inflation	3%				
Fixed Costs (annual)	1039				
Fixed costs inflation	4%				
Discount rate	10%				

## Mini Session 2: Payback

### ILLUSTRATION 1

Investment	10000				
Year	1	2	3	4	
Money in	2500	3000	9000	3600	

### ILLUSTRATION 2

Investment	8000				
Year	1	2	3	4	
Money in	2000	2200	6600	2640	

## Mini Session 3: NPV (Capital Allowance working)

### ILLUSTRATION 1

Cost	25000
Scrap Value	5000
Reducing balance	25%
Year of disposal	4
Tax rate	30%

### ILLUSTRATION 2

Cost	100,000
Scrap Value	16,000
Reducing balance	25%
Year of disposal	4
Tax rate	20%

## ILLUSTRATION 3

Cost	80,000
Scrap Value	20,000
Reducing balance	20%
Year of disposal	4
Tax rate	20%

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## Exam Questions

June 12 - 1a

June 13 - 1a

Specimen Paper MCQ 4