

TUTORIAL : TRADE & CASH DISCOUNT

1) An invoice of RM 7,389 dated 28th July 2011 including the transportation cost of RM100. The invoice stated a trade discount offer of 15%, 8% and cash discount terms of 5/7, 3/14, n/30. Find

i) the single discount rate that is equivalent to the series of trade discount given. (3 marks)

ii) the last date to receive 5% cash discount. (1 mark)

iii) the total amount of payment if it was made on 10th August 2011.

(5 marks)

$$\begin{aligned} \text{i) } r &= 1 - (1 - r_1)(1 - r_2) \quad \checkmark \\ r &= 1 - (1 - 0.15)(1 - 0.08) \quad \checkmark\checkmark \\ r &= 1 - 0.782 \quad \checkmark \\ r &= 0.218 \text{ or } 21.8\% \quad \checkmark\checkmark \end{aligned}$$

ii) 4 August 2011

$$\begin{aligned} \text{iii) } L &= L - \text{transportation cost} \\ &= 7,389 - 100 = 7,289 \quad \checkmark \end{aligned}$$

28 - 31	July	3 \checkmark
1 - 10	August	10 \checkmark
		13 days \checkmark

$$\text{Payment} = L(1 - r)(1 - c) + \text{transportation cost}$$

$$\begin{aligned} &= 7,289 (1 - 0.218)(1 - 0.03) + 100 \quad \checkmark\checkmark\checkmark\checkmark \\ &= 5,529 + 100 \\ &= \text{RM } 5,629 \quad \checkmark\checkmark \end{aligned}$$

2) Rohani received an invoice of RM5,500 including transportation cost of RM100 and dated 28th February 2011. The invoice was offered a trade discount of 10%, 8% and cash discount terms of 5/10, n/30.

i) Find the single discount rate that is equivalent to the trade discount given.

(3 marks)

ii) Find the amount of payment made if the invoice was settled on 9th March 2011.

(5 marks)

$$\begin{aligned}
 \text{i)} \quad r &= 1 - [(1 - r_1)(1 - r_2)] \quad \checkmark \\
 &= 1 - [(1 - 0.10)(1 - 0.08)] \quad \checkmark\checkmark \\
 &= 1 - [(0.90)(0.92)] \\
 &= 1 - 0.828 \quad \checkmark = 0.172 = 17.2\% \quad \checkmark\checkmark
 \end{aligned}$$

ii)

$$L = L - \text{transportation cost}$$

$$= 5,500 - 100 = 5,400 \quad \checkmark$$

28 - 28	Feb	0 \checkmark
1 - 9	March	9 \checkmark
		<hr style="width: 100%; border: 0; border-top: 1px solid black; margin: 0;"/> 9 days \checkmark

$$\text{Payment} = L(1 - r)(1 - c) + \text{transportation cost}$$

$$\begin{aligned}
 &= 5,400 (1 - 0.172)(1 - 0.05) + 100 \quad \checkmark\checkmark\checkmark\checkmark \\
 &= 4,247.64 + 100
 \end{aligned}$$

$$= \text{RM } 4,347.64 \quad \checkmark\checkmark$$

3) The net price of an item after a trade discount of 8% and 6% was RM 1, 850. The invoice was dated 21 February 2011 with cash terms of 5/10, 3/20, n/30.

- i) Find the list price of the item. (3 marks)
- ii) Calculate the last day to receive the 3% cash discount. (3 marks)
- iii) the total amount of payment if it was made on 11 March 2011. (4 marks)

$$NP = RM\ 1,850$$

$$r_1 = 8\%$$

$$r_2 = 6\%$$

$$CD = 5/10, 3/20, n/30.$$

$$i) \quad NP = L(1 - r_1)(1 - r_2)$$

$$1,850 = L(1 - 0.08)(1 - 0.06)$$

$$L = \frac{1,850}{(0.92)(0.94)} = RM\ 2,139.22$$

$$ii) \quad 21 - 28 \text{ Feb} \quad 7$$

$$1 - 13 \text{ March} \quad \underline{13}$$

$$\underline{20 \text{ days}}$$

last day to receive 3% cash discount is 13 March 2011

$$iii) \quad 21 - 28 \text{ Feb} \quad 7$$

$$1 - 11 \text{ March} \quad \underline{11}$$

$$\underline{18 \text{ days}}$$

payment on 11 march 2011 entitles to a 3% cash discount.

$$Payment = NP(1 - c)$$

$$= 1,850(1 - 0.03) = RM1,794.50$$

4) Fajar Sdn.Bhd received an invoice of RM 4,000 (including transportation cost of RM 150.00) dated 29 April. If invoice had discount terms of 10% and 5% and cash discount terms of $\frac{8}{12}, \frac{4}{20}, \frac{n}{30}$. Find

- i) the last payment date to receive cash discount of 8% (1 mark)
- ii) the last date to settled the invoice. What was this payment? (4 marks)
- iii) the net invoice price if the invoice was paid on 9 Mei? (5 marks)

i)

29 – 30	Apr	1	The last payment date = 11 Mei	✓✓
1 – 11	Mei	11		
			12 days	

ii)

29 – 30	Apr	1	The last date = 29 Mei	✓✓
1 – 29	Mei	29		
			30 days	

29 Mei

$$L = 4,000 - 150 = 3,850$$

$$NP = L (1 - r_1)(1 - r_2)$$

$$= 3,850 (1 - 0.1)(1 - 0.05) = \text{RM } 3,291.75 \quad \sqrt{\sqrt{\sqrt{\sqrt{}}}}$$

$$\text{Net Payment} = \text{NP} - \text{CD} + \text{transportation cost}$$

$$= 3,291.75 - 0 + 150 \quad \sqrt{\sqrt{}}$$

= RM 3,341.75

iii) 29 Apr

9 Mei = 10 days

$$L = 4,000 - 150 = 3,850$$

$$NP = L (1 - r_1)(1 - r_2)$$

$$= 3,850 (1 - 0.1)(1 - 0.05) = \text{RM } 3,291.75 \quad \sqrt{\sqrt{\sqrt{\sqrt{}}}}$$

$$\text{Net Payment} = \text{NP} - \text{CD} + \text{transportation cost}$$

$$= 3,291.75 - (0.08 \times 3,291.75) + 150 = \text{RM } 3,178.41$$